

# BOURAPHY



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# 1. Which of the following is true in context with Quinary activities?

- 1. Quinary activities are services that focus on the creation, re-arrangement and interpretation of new and existing ideas; data interpretation and the use and evaluation of new technologies.
- 2. These are often referred to as White Collar Professionals.
- 3. They represent another subdivision of the tertiary sector representing special and highly paid skills of senior business executives, government officials, research scientists, financial and legal consultants, etc.
- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1,2 and 3

**Answer: C** 

#### **Explanation**

- Quinary activities are services that focus on the creation, re-arrangement and interpretation of new and existing ideas; data interpretation and the use and evaluation of new technologies.
- Often referred to as gold collar' professions, they represent another subdivision of the tertiary sector representing special and highly paid skills of senior business executives, government officials, research scientists, financial and legal consultants, etc.

# 2. Which of the following best describes the word 'Possibilism' in context with Human Geography?

- A. The Environment sets certain constraints or limitations, but culture is otherwise determined by social conditions.
- B. It explains how the physical environment predisposes societies and states towards particular development trajectories.
- C. It explores the new-found possibilities of Origin of Universe.
- D. None of the above

Answer: A

## **Explanation**

Possibilism in Human geography is the theory that the environment sets certain constraints or limitations, but culture is otherwise determined by social conditions.

#### 3. Rutland Island was in news recently. It lies in

- A. Bay of Bengal
- B. Arabian Sea
- C. Indian Ocean
- D. None of the above



# Answer: A

# **Explanation**

#### Rutland Island

- It is in South Andaman
- It will be developed as DRDO's long range missile testing facility
- Island is very rich in Marine life
- The project was continuously stalled by the environment ministry as the project involves diversion of 49.978 acres forest land, of which 0.84 ha falls in the Mahatma Gandhi Marine National Park and 49.138 ha reserve forest within 10 km of the Eco Sensitive Zone.
- National Board of Wildlife as given its approval now due to strategic importance of the project
- 4. Which of the following crops are cultivated under dry land farming?
  - 1. Sugarcane
  - 2. Jute
  - 3. Guar
  - A. 1 only
  - B. 2 only
  - C. 3 only
  - D. All of the above

#### Answer: C

- In India, the dry land farming is largely confined to the regions having annual rainfall less than 75 cm.
- These regions grow hardy and drought resistant crops such as ragi, bajra, moong, gram and guar (fodder crops) and practice various measures of soil moisture conservation and rain water harvesting. In wetland farming, the rainfall is in excess of soil moisture requirement of plants during rainy season.
- Such regions may face flood and soil erosion hazards. These areas grow various water intensive crops such as rice, jute.
- 5. Match the following

Volcano		Place
1. Mount Vesuvius	a.	Hawaii
2. Mauna Loa	b.	Italy
3. Cotopax	c.	Equador
4. Mount Pinatubo	d.	Philippines



A. 1-a; 2-b; 3-c; 4-d

B. 1-b; 2-c; 3-a;4-d

C. 1-b; 2-a; 3-c;4-d

D. 1-a; 2-c; 3-d;4-b

Answer: C

# **Explanation**

1. Mount Vesuvius

a. Italy

2. Mauna Loa

b. Hawaii

3. Cotopaxi

c. Equador

4. Mount Pinatubo

d. Philippines

- 6. Push and Pull factors 'are two sets of factors that influence Migration'. Which of the following are true in context with the same?
  - 1. Pull factors make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and socio-economic backwardness.
  - 2. Push factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living conditions, peace and stability, security of life and property and pleasant climate.
  - A. 1 only
  - B. 2 only
  - C. Both 1 and 2
  - D. Neither 1 nor 2

#### Answer: D

- Migration may be permanent, temporary or seasonal. It may take place from rural to rural areas, rural to urban areas, urban to urban areas and urban to rural areas.
- People migrate for a better economic and social life. There are two sets of factors that influence migration.
- The Push factors make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and socio-economic backwardness. The Pull factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living conditions, peace and stability, security of life and property and pleasant climate.



# 7. The term 'Urban Sprawl' is often in news. Which one among the following best describes the term?

- A. A medium-sized human settlement that is generally larger than a village but smaller than a city
- B. An increase in a population in cities and towns versus rural areas
- C. It refers to the migration of a population from populated towns and cities to low density residential development over more and more rural land
- D. None of the above

Answer: C

# **Explanation**

**Urban Sprawl** 

It refers to the migration of a population from populated towns and cities to low density residential development over more and more rural land. The end result is the spreading of a city and its suburbs over more and more rural land. In other words, urban sprawl is defined as low density residential and commercial development on undeveloped land. Most of the time, people will move from these areas to try to find better areas to live.

- 8. Which of the following straits are not associated with String of Pearls?
  - 1. Strait of Malacca
  - 2. Bering Strait
  - 3. Lombok Strait
  - A. 1 only
  - B. 2 only
  - C. 3 only
  - D. None of the above

Answer: B

- The String of Pearls is a geopolitical theory on potential Chinese intentions in the Indian Ocean region
- It refers to the network of Chinese military and commercial facilities and relationships along its sea lines of communication, which extend from the Chinese mainland to Port Sudan in the Horn of Africa.
- The sea lines run through several major maritime choke points such as the Strait of Mandeb, the Strait of Malacca, the Strait of Hormuz, and the Lombok Strait as well as other strategic maritime centres in Pakistan, Sri Lanka, Bangladesh, the Maldives, and Somalia.
- 9. Akademik Lomonosov has been in news recently. It is
  - A. World's Only Floating Nuclear Power Unit



- B. World's Only Floating Wetland
- C. World's Only Mach-5 Spacecraft
- D. None of the above

Answer: A

# **Explanation**

It is the world's only floating nuclear power unit. (Russia)

# 10. Which of the following is incorrect in context with Truck Farming'?

- 1. The regions where farmers specialise in fruits only, the farming is known as truck farming.
- 2. The distance of truck farms from the market is governed by the distance that a truck can cover overnight, hence the name truck farming.
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: A** 

#### **Explanation**

The regions where farmers specialise in vegetables only, the farming is know as truck farming. The distance of truck farms from the market is governed by the distance that a truck can cover overnight, hence the name truck farming

# 11. Which of the following is matched incorrectly?

- 1. Golden Triangle: Myanmar, Laos, and Thailand
- 2. Golden Crescent: Afghanistan, Iran, and Pakistan
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: D** 

#### **Explanation**

#### **Golden Triangle**

It is the region between the borders of Myanmar, Laos, and Thailand; a famous region for its opium production.



#### **Golden Crescent**

It is the second major area of illicit opium production in Asia spanning across three nations; Afghanistan, Iran, and Pakistan. It is located at the crossroads of Central, South and Western Asia.



# 12. Which of the following are true with regard to Krem Puri?

- 1. It is the longest limestone cave in the world
- 2. It is located in the state of Meghalaya
- 3. It is located in the district of Mawsynram which is the wettest place on earth
- 4. Krem Puri cave system also has fossils of dinosaurs, especially Mosasaurus, a giant reptile that lived 66-76 million years ago
  - A. 1,2 and 3 only
  - B. 2,3 and 4 only
  - C. None of the above
  - D. All of these

#### **Answer: B**

#### **Explanation**

- The world's longest sandstone cave named Krem Puri was discovered near Laitsohum village in Mawsynram area in East Khasi Hills district of Meghalaya.
- The cave is 24,583 metres (24.5 km) in length and is known for its complex cave systems hidden under its undulating hills. Krem Puri underground cavern is more than 6,000 metres longer than world record-holder Cueva Del Saman in Edo Zulia, Venezuela, a quartzite sandstone cave measuring 18,200 metres (18.2km).
- This sandstone cave is also India's second longest cave in general category after limestone Krem Liat Prah-Umim-Labit system measuring little over 31 km in Jaintia Hills, Meghalaya. Krem Puri cave system also has fossils of dinosaurs, especially Mosasaurus, a giant reptile that lived 66-76 million years ago.

#### 13.Kalahari Desert lies in:

- 1. Angola
- 2. Namibia



- 3. South Africa
- 4. Botswana
- 5. Zambia
- A. 1,4 and 5 only
- B. 1,2,3 and 4 only
- C. 2,3 and 4 only
- D. 1,2 and 3 only

Answer: C

# **Explanation**



# 14.Consider the following statements

- 1. This layer of earth's crust makes up about 85% of the volume of the earth
- 2. Its density varies between 3.4-3.5 g/cubic cm to 5.5 g/ cubic cm
- 3. It contains dense, coarse grained igneous rocks mostly made of minerals like olivine and pyroxene Which layer of earth is explained here?
- A. Crust
- B. Mantle
- C. Outer core
- D. Inner core

**Answer: B** 

- The mantle extends from Moho's discontinuity (35 km) to a depth of 2,900 km (Moho- Discontinuity to the outer core).
- The crust and the uppermost part of the mantle are called lithosphere. Its thickness ranges from 10-200 km.



• The lower mantle extends beyond the asthenosphere. It is in solid state. The density of mantle varies between 2.9 and 3.3. The density ranges from 3.3 to 5.7 in the lower part. It is composed of solid rock and magma. It forms 83 per cent of the earth's volume. The outer layer of the mantle is partly simatic while the inner layer is composed of wholly simatic ultra-basic rocks.

# 15. Match the following

a. San or Bushman tribe

i. Sahara desert

b. Tuaregs

ii. Central Asia

c. Tatars

iii. Kalahari desert

A. a-i, b-ii, c-iii

B. a-iii, b-ii, c-i

C. a-iii, b-i, c-ii

D. a-ii, b-i, c-iii

**Answer: C** 

#### **Explanation**

a. San or Bushman tribe

i. Kalahari desert

b. Tuaregs

ii. Sahara desert

c. Tatars

iii. Central Asia

# 16. Tamil Nadu coast remains dry during the summer monsoon season. Identify the reason for the same?

- 1. Tamil Nadu coast is situated parallel to the Bay of Bengal branch of southwest monsoon.
- 2. It lies in the rain shadow area of the Arabian Sea branch of the southwest monsoon.
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

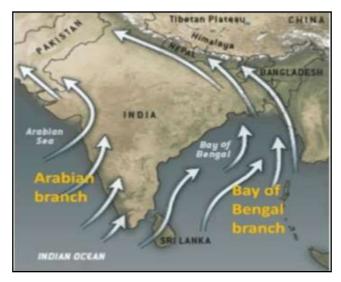
#### Answer: C

# **Explanation**

Tamil Nadu coast remains dry during this season. There are two factors responsible for it:

- 1. The Tamil Nadu coast is situated parallel to the Bay of Bengal branch of southwest monsoon.
- 2. It lies in the rain shadow area of the Arabian Sea branch of the southwest monsoon.





- 17. Which of the following states share its borders with Bangladesh?
  - 1. Mizoram
  - 2. Tripura
  - 3. Nagaland

# Choose the correct option

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

Answer: A



- 18.In which of the following regions of India are shale gas resources found? (UPSC 2016)
  - 1. Cambay Basin
  - 2. Cauvery Basin
  - 3. Krishna-Godavari Basin



# Select the correct answer using the code given below.

- A. 1 and 2 only
- B. 3 only
- C. 2 and 3 only
- D. 1,2 and 3 only

Answer: D

# **Explanation**

India has identified six basins as areas for shale gas exploration:

1. Cambay (Gujarat),

4. Krishna Godavari onshore (East Coast),

2. Assam-Arakan (North East),

5. Cauvery onshore,

3. Gondwana (Central India),

6. Indo-Gangetic basins

# 19.Oxygen gas is in negligible quantity at the height of atmosphere

- A. 90 km
- B. 100 km
- C. 120 km
- D. 150 km

**Answer: C** 

# **Explanation**

The atmosphere is composed of gases, water vapour and dust particles. The proportion of gases changes in the higher layers of the atmosphere in such a way that oxygen will be almost in negligible quantity at the height of 120 km. Similarly, carbon dioxide and water vapour are found only up to 90 km from the surface of the earth.

#### 20. Which one of the following Union Territories of India has the highest literacy rate as per 2011 Census?

- A. Lakshadweep
- B. Chandigarh
- C. Daman and Diu
- D. Andaman and Nicobar Islands

Answer: A

# **Explanation**

Lakshadweep has the highest literacy rate.

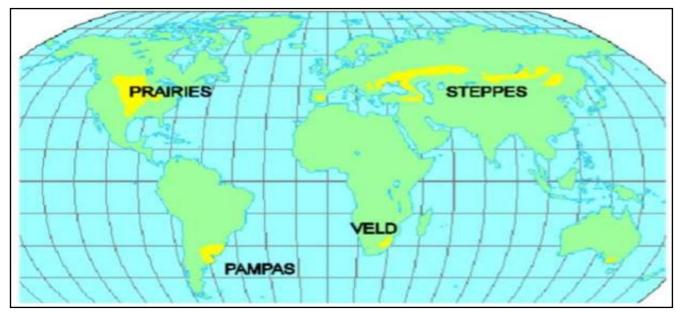


# 21.Identify

- 1. Temperate grass lands.
- 2. They are bound by the Rocky Mountains in the West and the Great Lakes in the East.
- 3. Due to the absence of the north-south barrier, a local wind —Chinook— blows here.
- A. Prairies
- B. Pamps
- C. Velds
- D. Savannas

# Answer: A Explanation

- The prairies are bound by the Rocky Mountains in the West and the Great Lakes in the East. The temperate grasslands of North America are known as the Prairies. In the USA, the area is drained by the tributaries of Mississippi and the Canadian prairies are drained by the tributaries of Saskatchewan Rivers. It is a region of flat, gently sloping or hilly land. For the most part, prairies are treeless but, near the low lying plains, flanking river valleys, woodlands can be found.
- Tall grass, upto two metres high, dominates, the landscape. It is actually a —sea of grass. Being located in the heart of a continent, the climate is of continental type with extreme temperatures.
- The summers are warm with temperatures of around 20°C, while in winter -20°C has been recorded in Winnipeg, Canada. In winters a thick blanket of snow covers this region. The annual rainfall is moderate and is ideal for the growth of grass. Due to the absence of the north-south barrier, a local wind —Chinook blows here.



- 22. Which of the following are false in context with Andaman and Nicobar Islands in India?
  - A. Barren island, the only inactive volcano in India is situated in the Great Andaman.
  - B. Duncan passage separates Little Andaman from South Andaman.



- C. Port Blair, the capital of Andaman Nicobar Islands lies in the South Andaman.
- D. The Great Andaman group of islands in the north is separated by the Ten Degree Channel from the Nicobar group in the south.

#### **Answer: A**

# **Explanation**

- This archipelago is composed of 265 big and small islands [203 Andaman islands + 62 Nicobar Islands]. The Andaman and Nicobar islands extend from 6° 45′ N to 13° 45′ N and from 92° 10′ E to 94° 15′ E for a distance Adams bridge Ram setu islands of about 590 km.
- The Andaman islands are divided into three main islands i.e. North, Middle and South. Duncan passage separates Little Andaman from South Andaman.
- The Great Andaman group of islands in the north is separated by the Ten Degree Channel from the Nicobar group in the south. Port Blair, the capital of Andaman Nicobar Islands lies in the South Andaman. Among the Nicobar islands, the Great Nicobar is the largest. It is the southernmost island and is very close to Sumatra island of Indonesia. The Car Nicobar is the northernmost.
- The Barren and Narcondam Islands, north of Port Blair, are volcanic. Some of the islands are fringed with coral reefs.
- Many of them are covered with thick forests. Most of the islands are mountainous. Saddle peak (737 m) in North Andaman is the highest peak.

#### 23. Yokahama Strategy can be associated with:

- A. Disaster Risk Management
- B. Ozone Depletion
- C. Nuclear Disarmament
- D. None of the above

#### Answer: A

#### **Explanation**

The resolution of the World Conference on Natural Disasters Reduction is as mentioned below:

- It will note that each country has the sovereign responsibility to protect its citizens from natural disasters;
- It will give priority attention to the developing countries, particularly the least developed, land-locked countries and small-island developing states;
- It will develop and strengthen national capacities and capabilities and, where appropriate, national legislation for natural and other disaster prevention, mitigation and preparedness, including the mobilisation of non-governmental organisations and participation of local communities;
- It will promote and strengthen sub-regional, regional and international cooperation in activities to prevent, reduce and mitigate natural and other disasters, with particular emphasis on:



- ✓ human and institutional capacity-building and strengthening;
- ✓ technology sharing: the collection, the dissemination and utilisation of information; and
- ✓ mobilisation of resources.
- It also declared the decade 1990- 2000 as the International Decade for Natural Disaster Reduction (IDNDR). All the member states of the United Nations and other states met at the World Conference on Natural Disaster Reduction in the city of Yokohama from May 23rd-27th 1994.
- It acknowledged that the impact of natural disasters in terms of human and economic losses has risen in recent years, and society, in general, has become vulnerable to natural disasters.
- It also accepted that these disasters affected the poor and disadvantageous groups the worst, particularly in the developing countries, which are ill- equipped to cope with them. Hence, the conference adopted the Yokohama strategy as a guide to rest of the decade and beyond, to mitigate the losses due to these disasters.

Note: Refer To Sendai Framework

#### 24.Arrange the following by decreasing percentage of volume of Permanent Gases in the Atmosphere:-

- 1. Argon
- 2. Carbon Dioxide
- 3. Neon
- 4. Helium
- A. 1-3-2-4
- B. 2-1-3-4
- C. 2-4-3-1
- D. 1-2-3-4

Answer: D

	Table 8.1 : Permanent Gases of the Atmosphere			
Constituent	Formula	Percentage by Volume		
Nitrogen	N <sub>2</sub>	78.08		
Oxygen	0,	20.95		
Angon	Ar	0.93		
Carbon dioxide	CO.	0.036		
Neon	Ne	0.002		
Helium	He	0.0005		
Krypto	Kr	0.001		
Xenon	Xe	0.00009		
Hydrogen	H.	0.00005		



# 25. Which of the following is/are incorrect in context with the given Land Use Categories?

- 1. Current Fallow is the land which is left without cultivation for one or less than one agricultural year.
- 2. Fallow other than Current Fallow is also a cultivable land which is left uncultivated for more than a year but less than three years.
- 3. If the land is left uncultivated for more than five years, it would be categorized as culturable wasteland.
- A. 1 only
- B. 2 only
- C. 3 only
- D. None of the above

#### Answer: B

#### **Explanation**

Following is a cultural practice adopted for giving the land rest. The land recoups the lost fertility through natural processes.

- Current Fallow: This is the land which is left without cultivation for one or less than one agricultural year.
- Fallow other than Current Fallow: This is also a cultivable land which is left uncultivated for more than a year but less than five years. If the land is left uncultivated for more than five years, it would be categorised as culturable wasteland.
- Culturable Waste-Land: Any land which is left fallow (uncultivated) for more than five years is included in this category. It can be brought under cultivation after improving it through reclamation practices

# 26.Look at following characteristics:

- 1. Rainfall is less than 50 cm annually
- 2. Mean temperature is around 25-30 deg Celsius
- 3. Trees are not tall (6-10 m) and widely scattered
- 4. Scrub vegetation like wild date palm and Neem

#### They can be found in?

- A. Plains of UP and Bihar
- B. Eastern MP and Chhattisgarh
- C. Semi-arid areas of Punjab and Haryana
- D. Eastern Ghats

#### Answer: C



# **Explanation**

All characteristics are part of tropical thorn forest type which are also found in Rajasthan, Gujarat, Telengana, Andhra Pradesh and some parts of Uttar Pradesh and Tamil Nadu

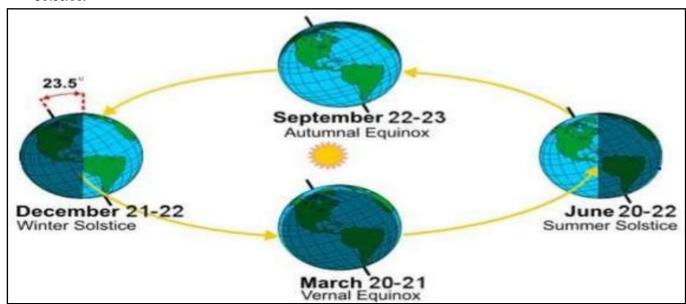
# 27. During the time of western disturbances, Sun shines directly over (or nearby).

- A. Tropic of Cancer
- B. Equator
- C. Tropic of Capricorn
- D. South Pole

**Answer: C** 

# **Explanation**

- On 22nd December, the Tropic of Capricorn receives direct rays of the sun as the south pole tilts towards it. As the sun's rays fall vertically at the Tropic of Capricorn (23½° s), a larger portion of the southern hemisphere gets light. Therefore, it is summer in the southern hemisphere with longer days and shorter nights.
- The reverse happens in the northern hemisphere. This position of the earth is called the winter solstice.



#### 28. Why oceans in northern Hemisphere are warmer than Southern Hemisphere?

- A. Unequal distribution of land and water
- B. Difference in insolation
- C. Tilt of earth axis
- D. Presence of frozen continental mass (Antarctica) in southern Hemisphere

Answer: A



#### **Explanation**

Southern Hemisphere climates tend to be slightly milder than those at similar latitudes in the Northern Hemisphere, except in the Antarctic which is colder than the Arctic. This is because the Southern Hemisphere has significantly more ocean and much less land; water heats up and cools down more slowly than land.

# 29. Which of the following statements are <u>incorrect</u> with regard to Ocean Currents?

- 1. The speed of currents decreases with depth.
- 2. Cold currents are usually found on the west coast of continents in low and middle latitudes
- 3. Ocean currents move in a clockwise direction in Southern hemisphere and anti-clockwise in northern hemisphere
- 4. Warm ocean currents are wide and deep while cold ocean currents are narrow and shallow.
- A. 3 and 4 only
- B. 2 and 3 only
- C. 1 and 4 only
- D. 1 and 3 only

#### Answer: A

#### **Explanation**

- Ocean currents are general movement of a mass of surface water in a fairly defined direction. It is a persistent, mostly horizontal flow of oceanic water. Cold currents are found on the western coast in low and middle latitudes and on the eastern coast in higher latitudes. The tropical deserts found on the western margins of the continent owe their existence to these cold currents.
- The Ocean Currents move in a clockwise direction in Norther Hemisphere and anti-clockwise direction in Southern Hemisphere. Warm ocean currents are wide and shallow while cold ocean currents are narrow and deep.

#### 30.Identify the incorrect pair of Gulfs and places they separate.

- A. Gulf of Lyon England and France
- B. Gulf of Tonkin China And Vietnam
- C. Gulf of Tatary Russia and Sea of Japan
- D. Gulf of Aqabah Red sea, Egypt and Israel

Answer: A

#### **Explanation**

It is between France and Spain





# 31. Consider the following statements with respect to Coal Bed Methane:

- 1. It is called 'sweet gas' because of its lack of hydrogen sulphide.
- 2. It is trapped within shale rock formations in sedimentary basins.

#### Which of the above statements are correct?

- A. Neither 1 nor 2
- B. 1 only
- C. 2 only
- D. Both 1 and 2

#### **Answer: B**

# **Explanation**

- Coal bed methane (CBM or coal-bed methane), coal bed gas, coal seam gas or coal-mine methane is a form of natural gas extracted from coal beds. In recent decades it has become an important source of energy in United States, Canada, Australia, and other countries.
- The term refers to methane adsorbed into the solid matrix of the coal. It is called 'sweet gas' because of its lack of hydrogen sulfide.

# 32. Consider the following:

- 1. Jaduguda mine
- 2. Tummalapalle mine
- 3. Khetri mine

#### Which of the above is/are Uranium mines in India?

- A. 1 and 2 only
- B. 2 and 3 only



C. 1 and 3 only

D. All

Answer: A

# **Explanation**

Khetri mines - copper

- 33. Which of the following statements are correct about tropical and extra tropical (temperate) cyclones?
  - 1. Wind velocity in tropical cyclone is more than temperate cyclones
  - 2. Tropical cyclone impacts much larger area than temperate cyclone

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

#### **Explanation**

Tropical cyclones range from 150-200 kms with high velocity where as temperate cyclones are larger in size ranging around 1900 km and due to large size it moves slower at the speed of 40-60 kmph.

- 34. Pick the name of pressure system from following characteristics.
  - 1. Lies between 10°N and 10°S latitudes
  - 2. zone of convergence of trade winds from two hemispheres from sub-tropical high pressure belts
  - 3. The position of the belt varies with the apparent movement of the Sun

Which of the above statements are correct?

- A. Doldrums
- B. Horse Latitudes
- C. Furious Forties
- D. None of the above

Answer: A

# **Explanation**

• Doldrums, also called equatorial calms, equatorial regions of light ocean currents and winds within the Inter-Tropical Convergence Zone (ITCZ), a belt of converging winds and rising air encircling Earth near the Equator.



- The northeast and southeast trade winds meet there; this meeting causes air uplift and often
  produces clusters of convective thunderstorms. They occur along the Equator in the Indian and
  western Pacific oceans and slightly north of the Equator off the African and Central American west
  coasts.
- The crews of sailing ships dreaded the doldrums because their ships were often becalmed there; the designation for the resultant state of depression was apparently thus extended to these geographic regions themselves.

# 35. Which of the following statements are true about river Indus?

- 1. It originated from Rakas Lake in Tibet
- 2. Satluj is its largest tributary
- 3. Dras river is its right hand tributary

#### Which of the above statements are correct?

- A. 3 only
- B. 2 and 3 only
- C. All of the above
- D. None of the above

**Answer: D** 

# **Explanation**

- Chenab is largest tributary of Indus which originates from a place called Bokhar Chu in Kailash mountain range.
- Dras is not its straight tributary and even if it is considered as one, it will be its left hand side tributary

# 36.Which of the following are true about Sustainable Action for Climate Resilient Development (SaCReD) Initiative?

- 1. It ensures that infrastructure in Majuli has less carbon. It aims to battle climate change and reduce greenhouse gas emissions.
- 2. It aims to make the Majuli island a biodiversity heritage site in order to preserve its rich heritage and legacy.

Which of the following is/are correct in this context?

- A. 1 only
- B. 2 only
- C. Both
- D. None

Answer: C



#### **Explanation**

- Assam Government launched Sustainable Action for Climate Resilient Development (SaCReD)
   Initiative to develop Majuli, the world's largest river island, as the country's first carbon neutral district.
- It was launched by state Chief Minister Chief Minister Sarbananda Sonowal on the occasion of International Day of Forests (observed on March 21). aCReD Initiative will also ensure that infrastructure in Majuli has less carbon. It aims to battle climate change and reduce greenhouse gas emissions.
- The will also aim to make the Majuli island a biodiversity heritage site (BHS), first in the state in order to preserve its rich heritage and legacy. State Government also launched registry in Majuli to record and analyse the climate impact of all proposed projects in the district. Forests are Lives campaign was also launched to underline the importance of Assam's rich forest and biodiversity. It urges people to take a pledge to conserve its biodiversity to make the state pollution free.

# 37. Which of the folowing statements are true with regard to tropical cyclones?

- 1. Their winds blow counter clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere
- 2. They form over relatively warm water bodies.
- 3. The Benguela and Humboldt Currents prevent formation of cyclones around South America and Africa

Which of the following is/are correct in this context?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1,2 and 3 only

#### **Answer: D**

# **Explanation**

- Tropical cyclone is a rapidly rotating storm system characterized by a low pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain.
- Tropical refers to the geographical origin of these systems, which form almost exclusively over tropical seas. Cyclone refers to their winds moving in a circle, whirling round their central clear eye, with their winds blowing counterclockwise in the Northern Hemisphere and blowing clockwise in the Southern Hemisphere.
- The opposite direction of circulation is due to the Coriolis effect. Tropical cyclones typically form over large bodies of relatively warm water.
- They derive their energy through the evaporation of water from the ocean surface, which ultimately recondenses into clouds and rain when moist air rises and cools to saturation. Tropical cyclones are

www.YouTube.com/SleepyClasses



also almost completely absent from Earth's southwestern quartersphere, mainly because the shapes of the African and South American continents permit the Benguela and Humboldt Currents to cover ocean basins as far north as 5°N with excessively cool water.

• These powerful cold currents also produce much stronger vertical wind shear in the South Atlantic and Southeast Pacific, which typically prevent tropical depressions and minor storms there from developing into cyclones.

# 38. Which of the following area is situated on or near to McMahon Line?

- A. Farakka Barrage
- B. Diphu Pass
- C. Jelep La
- D. Sylhet

## **Answer: B**

#### **Explanation**

- Diphu Pass is a mountain pass around the area of the disputed tripoint borders of India, China, and Myanmar.
- Diphu Pass is also a strategic approach to eastern Assam. It lies on the McMahon Line.

# 39. Which is the most probable reason for less rainfall in central peninsular India?

- A. Funneling effect
- B. Rain shadow effect
- C. Shoaling effect
- D. Rossby waves

#### **Answer: B**

- Doldrums, also called equatorial calms, equatorial regions of light ocean currents and winds within the Inter-Tropical Convergence Zone (ITCZ), a belt of converging winds and rising air encircling Earth near the Equator.
- The northeast and southeast trade winds meet there; this meeting causes air uplift and often produces clusters of convective thunderstorms.
- They occur along the Equator in the Indian and western Pacific oceans and slightly north of the Equator off the African and Central American west coasts.
- The crews of sailing ships dreaded the doldrums because their ships were often becalmed there; the designation for the resultant state of depression was apparently thus extended to these geographic regions themselves.



# 40. Which of the following Biosphere reserves are incorrectly matched?

- 1. Seshachalam- Andhra Pradesh
- 2. Achanakmar- Jharkhand
- 3. Nokrek-Manipur
- 4. Pachmarhi- Madhya Pradesh

# Which of the following is/are correct in this context?

- A. 1, 2 and 4 only
- B. 3 and 4 only
- C. 2 and 3 only
- D. 2, 3 and 4 only

**Answer: C** 

#### **Explanation**

Achanakmar-Chattisgarh

Nokrek-Meghalaya

# 41. Which of the following is true regarding the Malpelo Plate?

- 1. It is a new tectonic mircoplate that has been discovered.
- 2. It is located in the Pacific Ocean.

Which of the following is/are correct in this context?

- A. 1 only
- B. 2 only
- C. Both
- D. None

**Answer: C** 

- A tectonic plate is essentially a part-crust, part-mantle that is pushed around by the convecting currents of superheated rock (magma) beneath them. There are total eight major tectonic plates (with an area greater than 20 million km2), ten minor tectonic plates (area between 1 and 20 million km2).
- Interactions at the edges of moving plates account for most earthquakes and volcanic eruptions on the Earth. Malpelo microplate is located west of the Galapagos Islands off the coast of Ecuador in eastern Pacific Ocean. It is wedged in-between the Nazca, Cocos, and Caribbean minor plates. It is linked to a nearby oceanic ridge along the Ring of Fire.
- Earlier it was that assumed most of the region east of the known Panama transform fault was part of the Nazca plate. But recent study showed that it is different tectonic plate moving independently in a





different direction. Evidence for the Malpelo plate came with the researchers'identification of a diffuse plate boundary that runs from the Panama Transform Fault eastward to where it intersects a deep oceanic trench just offshore of Ecuador and Colombia.

## 42. Which of the following statements about ocean currents are true?

- 1. Cold ocean currents have a direct effect on desert formation in west coast regions of the tropical and subtropical continents.
- 2. Warm ocean currents bring rain to coastal areas and even interiors.

Which of the following is/are correct in this context?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: C

#### **Explanation**

- Desert formation
  - ✓ Cold ocean currents have a direct effect on desert formation in west coast regions of the tropical and subtropical continents. There is fog and most of the areas are arid due to desiccating effect (loss of moisture).
- Rains
  - ✓ Warm ocean currents bring rain to coastal areas and even interiors. Example: Summer Rainfall in British Type climate. Warm currents flow parallel to the east coasts of the continents in tropical and subtropical latitudes. This results in warm and rainy climates. These areas lie in the western margins of the subtropical anti-cyclones.

# 43. Which of the following state of India has Nagtibha range?

- A. Himachal Pradesh
- B. Uttarakhand
- C. Sikkim
- D. Arunachal Pradesh

**Answer: B** 

# **Explanation**

Nag Tibba ('Serpent's Peak'), 3,022 metres (9,915 ft), is the highest peak in the lesser himalayan region of Uttarakhand state (Garhwal Division), and lends its name to the 'Nag Tibba Range'.



# 44. Which of the following type of rainfall is linked with retreating monsoons?

- A. Bay of Bengal branch of South West monsoon
- B. Arabian Sea Branch of South West monsoon
- C. Western Disturbances
- D. North East monsoon

Answer: D

#### **Explanation**

After conventional monsoons, North east trade winds re emerge over Indian Subcontinent which signals retreat of monsoonal winds.

# 45. Consider the following facts about the Himalayas.

- 1. Western Himalayas are loftier than the eastern Himalayas
- 2. Western Himalayas receive most of their rainfall in south west monsoon while eastern Himalayas receive most of their rainfall during winters

Which of the following is/are correct in this context?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

Answer: A

**Explanation:** Point 2 has facts interchanged for western and eastern Himalayas

# 46.Consider the following:

- 1. Large estates
- 2. Cheap Labour
- 3. Single crop specialisation

Which of the above are features of Plantation Agriculture?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

**Answer: C** 



**Explanation:** The characteristic features are large estates or plantations, large capital investment, managerial and technical support, scientific methods of cultivation, single crop specialisation, cheap labour, and a good system of transportation which links the estates to the factories and markets for the export of the products.

# 47. What does a "Bell shaped Pyramid tapered at top" signify about the population of a country

- A. It reflects that the number of people with lower age groups is larger and thus there would be high birth rates
- B. It reflects that the population growth is around zero or negative
- C. This shows birth and death rates are almost equal leading to a near constant population
- D. None of these

Answer: C

**Explanation:** This shows birth and death rates are almost equal leading to a near constant population.

# 48. Gas hydrates are a naturally occurring, ice-like combination of

- A. Carbon Dioxide and water
- B. Natural gas and Water
- C. Nitrogen dioxide and Water
- D. None of the above

#### **Answer: B**

#### **Explanation**

- Natural gas hydrates are a naturally occurring, ice-like combination of natural gas and water found in oceans and polar regions.
- The amount of gas within the world's gas hydrate accumulations is estimated to greatly exceed the volume of all known conventional gas resources. They are considered as vast resources of natural gas and are known to occur in marine sediments on continental shelf margins.
- Gas hydrate resources in India are estimated at 1,894 trillion cubic meters and these deposits occur in Western, Eastern and Andaman offshore areas.

# 49. Consider the following regarding Biofuels

- 1. First generation biofuels are produced directly from food crops.
- 2. Fourth generation biofuels use specially engineered energy crops such as algae.
- 3. Third generation biofuels are aimed at capturing and storing carbon dioxide also.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 and 3 only





C. 1 and 3 only

D. All

Answer: A

#### **Explanation**

- First Generation biofuels are produced directly from food crops by abstracting the oils for use in biodiesel or producing bioethanol through fermentation.
- Crops such as wheat and sugar are the most widely used feedstock for bioethanol while oil seed rape has proved a very effective crop for use in biodiesel. Second Generation biofuels are produced from non-food crops such as wood, organic waste, food crop waste and specific biomass crops.
- Cellulosic ethanol technology fits in here, as do non-food crop technologies such as jatropha-based biofuels. Third Generation of biofuels is based on improvements in the production of biomass. It takes advantage of specially engineered energy crops such as algae as its energy source.
- The algae are cultured to act as a low-cost, high-energy and entirely renewable feedstock. Fourth Generation Biofuels are aimed at not only producing sustainable energy but also a way of capturing and storing CO2.

# 50.Willy is

- A. a type of tree grown in temperate regions
- B. a wind that blows in a desert
- C. a tropical cyclone of the north-west Australia
- D. a kind of common fish found near Laccadives Islands

**Answer: C** 

#### **Explanation**

It is a tropical cyclone of north-west Australia. Willy Willy originates in the Timor sea and causes rainfall in different parts of Australia.

# 51. Which of the following are features of Foot Loose Industries?

- 1. They are not dependent on any specific raw material, weight losing or otherwise.
- 2. They produce in small quantity and also employ a small labour force.

# Choose the correct option

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: C** 



# **Explanation**

- Footloose industry is a general term for an industry that can be placed and located at any location without effect from factors of production such as resources, land, labour, and capital.
- These industries often have spatially fixed costs, which means that the costs of the products do not change despite where the product is assembled. Diamonds, computer chips, and mobile manufacturing are some examples of footloose industries. These are generally nonpolluting industries.
- Non-footloose industries generally require raw material availability within a time limit to make products. Sugar industry, jute industry and tea industry are the examples of non-footloose industries.

# 52. Andes mountains are type of fold mountains which are formed due to convergence of

- A. Cocos plate and South American plate.
- B. Nazca plate and South American plate.
- C. Caroline plate and Cocos plate.
- D. Caroline plate and South American plate

**Answer: B** 

# 53. Downward transportation of soil components through soil profile is called

- A. Hard Pans
- B. Eluviation
- C. Illuviation
- D. Leaching

Answer: C

**Explanation:** The introduction of salts or colloids into one soil horizon from another by percolating water.

#### 54. Which of the following are true with regard to slip strike earthquake?

- 1. These occur when two plates slide horizontally against one another causing deformations that occur in plates distant from fault lines.
- 2. They can lead to inter-plate earthquakes and cause a plate to break, resulting in a new boundary and this in turn can lead to even more quakes.
- A. 2 only
- B. Both
- C. None
- D. 1 only

**Answer: B** 



# 55. Which of the following statements is/are correct?

- 1. Downstream sector includes oil exploration, prospection and extraction/production from oil wells.
- 2. Midstream sector involves transportation of oil and gas from blocks to refineries and from refineries to distribution centers.
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

#### **Answer: B**

# **Explanation**

- The oil and gas industry is usually divided into three major components: upstream, midstream and downstream.
- The upstream sector includes searching for potential underground or underwater crude oil and natural gas fields, drilling exploratory wells, and subsequently drilling and operating the wells that recover and bring the crude oil or raw natural gas to the surface.
- The midstream sector involves the transportation (by pipeline, rail, barge, oil tanker or truck), storage, and wholesale marketing of crude or refined petroleum products.
- The downstream sector is the refining of petroleum crude oil and the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas.

56.In which of the following geographical regions live the tribes Toda, Kota, Kurumba, Irula, Paniyan and Kattunaicken recognized by the Government of India as Primitive Tribal Groups (PTGs).

- A. North East States
- B. Nilgiri Mountains
- C. Central India
- D. Thar Desert

# Answer: B

- The Nilgiri Hills is a region of mountains, forests and tea plantations located in southern India where the states of Tamil Nadu, Kerala and Karnataka all come together and rise to a height of 2,400 meters.
- The highlands are rolling grasslands with patches of temperate forest known as shola. The NilgiriHills is home to some tribal groups including the Toda, Kota, Badaga and Kurumba, Irula, Nayaka, Kani, kattunaicken.



# 57. What is the direction of Himalayas in Arunachal Pradesh?

- A. North east to south west
- B. South west to North east
- C. South east to north east
- D. North to south

**Answer: B** 

# 58.Look at these characteristics about a weather phenomenon

- 1. They move eastwards across the sub-Himalayan belt
- 2. They cause light rain in the Indus-Ganga plains and snowfall in the Himalayan belt
- 3. After its passage, widespread fog and cold waves lowering the minimum temperature by5° to 10°C below normal are experienced they are

#### Which of the above statements are correct?

- A. South West monsoons
- B. North East monsoons
- C. Western Disturbances
- D. Loo

Answer: C

# 59. Which among the following cities is/are known as prominent center of Silk Production?

- 1. Bhagalpur
- 2. Paithan
- 3. Bishnupur
- 4. Chanderi
- 5. Sualkuchi
- 6. Champa

#### Which of the above statements are correct?

- A. 1,2,3 and 5 only
- B. 2, 3,4 and 6 only
- C. 1,3,4,5 and 6 only
- D. All

Answer: C



# **Explanation**

- Andhra Pradesh Dharmavaram, Pochampalli, Venkatagiri, Narainpet Assam Sualkuchi
- Bihar Bhagalpur Gujarat Surat, Cambay
- Jammu & Kashmir Srinagar
- Karnataka Bangalore, Anekal, Ilkal, Molakalmuru, Melkote, Kollegal Chattisgarh Champa, Chanderi, Raigarh
- Maharashtra Paithan
- Tamil Nadu Kanchipuram, Arni, Salem, Kumbhakonam, Tanjavur Uttar Pradesh Varanasi
- WestBengal Bishnupur, Murshidabad, Birbhum

# 60. Most of the Jute Mills of India are located in which state

- A. Chhattisgarh
- B. West Bengal
- C. Assam
- D. Orissa

**Answer: B** 

Explanation: West Bengal is the largest jute producing state of India

#### 61. Which of the following ranges are part of Trans-himalayan mountain ranges?

- 1. Zaskar range
- 2. Kailash range
- 3. Karakorum range

#### Which of the above statements are correct?

- A. 3 only
- B. 2 and 3 only
- C. 1 only
- D. All

# **Answer: D**

- Transhimalaya (also spelled Trans-Himalaya) or "Gangdise-Nyenchen Tanglha range", is a 1600-kilometre-long mountain range in Tibet, India and in POK, extending in a west-east direction parallel to the main Himalayan range.
- Trans Himalayas are divided into following ranges:
  - √ Ladakh Range



- ✓ Zaskar Range
- √ Karakoram Range
- √ Kailash Range

# 62.Beyond tropics, in Northern Hemisphere, south facing slope of the mountain will be

- A. exposed to sunlight more
- B. less exposed to sunlight
- C. will receive more rainfall
- D. will have more volcanism

#### Answer: A

# **Explanation**

- In the Northern Hemisphere, north-facing slopes in latitudes from about 30 to 55 degrees receive less direct sunlight than south-facing slopes.
- The lack of direct sunlight throughout the day, whether in winter or summer, results in north-facing slopes being cooler than south-facing slopes.
- During winter months, portions of north-facing slopes may remain shaded throughout the day due to the low angle of the sun. This causes snow on north-facing slopes to melt slower than on south-facing
- The scenario is just the opposite for slopes in the Southern Hemisphere, where north-facing slopes receive more sunlight and are consequently warmer. Near the equator, north- and south-facing slopes receive roughly the same amount of sunlight because the sun is almost directly overhead.
- At the poles, north and south slopes tend to be either shrouded in darkness all winter long, or bathed in sunlight all summer long, with only slight variation between the slopes in spring and fall.

# 63.Between which two states of India, Pal ghat or Pal gap is situated?

- A. Karnataka and kerala
- B. Karnataka and Tamil Nadu
- C. Tamilnadu and Andhra
- D. Kerala and Tamil Nadu

# **Answer: D**

# 64. Which of the following are true with regard to Jet Streams?

- 1. These are a system of upper air westerlies giving rise to fast moving upper air waves.
- 2. These are wide zones with wind velocities upto 250 knots
- 3. They develop just above the tropopause
- 4. They blow perpendicular to isobars





#### Which of the above statements are correct?

- A. 1 and 3 only
- B. 1,2 and 3 only
- C. All
- D. None

#### Answer: D

#### **Explanation**

- Jet streams are relatively narrow bands of strong wind in the upper levels of the atmosphere. The winds blow from west to east in jet streams but the flow often shifts to the north and south. Jet streams follow the boundaries between hot and cold air. Since these hot and cold air boundaries are most pronounced in winter, jet streams are the strongest for both the northern and southern hemisphere winters.
- As the difference in temperature increases between the two locations the strength of the wind increases. Therefore, the regions around 30° N/S and 50°-60° N/S are also regions where the wind, in the upper atmosphere, is the strongest. Jet streams are the product of two factors: the atmospheric heating by solar radiation that produces the large scale Polar, Ferrel, and Hadley circulation cells, and the action of the Coriolis force acting on those moving masses.
- They are formed just below the tropopause over area of very steep pressure gradient and flow parallel to the isobars. The 50°-60° N/S region is where the polar jet located with the subtropical jet located around 30°N. Jet streams vary in height of four to eight miles and can reach speeds of more than 275 mph (239 kts / 442 km/h).
- The actual appearance of jet streams result from the complex interaction between many variables such as the location of high and low pressure systems, warm and cold air, and seasonal changes. They meander around the globe, dipping and rising in altitude/latitude, splitting at times and forming eddies, and even disappearing altogether to appear somewhere else. Jet streams also "follow the sun" in that as the sun's elevation increases each day in the spring, the average latitude of the jet stream shifts poleward. As Autumn approaches and the sun's elevation decreases, the jet stream's average latitude moves toward the equator.

#### 65. Identify the correct statements in the context of Earth Hour.

- 1. It is organised by WWF to enable harmonious existence of human and wildlife.
- 2. It is to take a global call on climate change cities.
- 3. To mark it worldwide, lights are turned off for one hour from 8:30 pm to 9:30pm local time.

#### Which of the above statements are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only



D. All of the above

**Answer: D** 

**Explanation:** All the statements are true. Additionally, 1st Earth Hour was observed in Sydney.

# 66.Hogenakkal waterfall is on the river

- A. Shimsha
- B. Bharatpuzha
- C. Kaveri
- D. Tungbhadra

Answer: C

**Explanation:** List Of Waterfalls In India

https://en.wikipedia.org/wiki/List of waterfalls in India by height

#### 67. Choose the correct option?

- A. Monsoonal rainfall decreases when we go from west to east in India
- B. Mango showers are monsoonal showers
- C. One of the reason for formation of Thar desert is strong divergence by high pressure belt
- D. Somali Jet weakens permanent high near Madagascar which slows South West monsoons

Answer: C

**Explanation:** Mango showers are pre monsoonal while option and are opposite of what is written.

# 68. Which of the following separates North eastern plateaus from Chotanagpur plateau?

- A. Rajmahal Hills
- B. Malda fault
- C. Bhima fault
- D. Indus Suture Zone

**Answer: B** 

**Explanation:** The northeastern parts of India are separated by the Malda fault in west Bengal from the Chotanagpur Plateau.

#### 69. Which of the following states is molasses basin in India?

- A. Assam
- B. Meghalaya
- C. Mizoram
- D. Manipur



# **Answer: C**

# **Explanation**

- Mizoram is known as Land of Rolling mountains, i.e it has huge number of mountains. formation of most mountains are accompanied by formation of foreland basin or in simple terms valley type depression which runs parallel to mountains.
- These depression get accumulated with unconsolidated deposits known as molasses basin.

## 70.Brazzaville Declaration is in the context of

- A. Wetlands
- B. Grasslands
- C. Peatlands
- D. None of the above

#### Answer: C

#### **Explanation**

- The Brazzaville declaration was singed to promote better management and conservation world's largest tropical peatlands Cuvette Central region in Congo Basin from unregulated land use and prevent its drainage and degradation.
- Peatlands are wetlands that contain mixture of decomposed organic material, partially submerged in layer of water, lacking oxygen

# 71.Breccia and flint are types of:

- A. Igneous rocks
- B. Sedimentary rocks
- C. Metamorphic rocks
- D. None of the above

# Answer: B

- Breccia is a rock consisting of angular fragments of stones which are cemented by finer calcareous material
- Flint is a hard type of sedimentary rock that produces a small piece of burning material when hit by steel Sedimentary Rocks Formed as a result of denudation (weathering and erosion).
- These deposits through compaction turn into rocks. This process is called lithification.
- Cover 75 per cent of the earth's crust but volumetrically occupy only 5 per cent.
- They are layered or stratified of varying thickness. Example: sandstone, shale etc.
- Till or Tillite Ice deposited sedimentary rocks.



- Loess Wind deposited sediments.
- Depending upon the mode of formation, they are classified into
  - ✓ mechanically formed sandstone, conglomerate, limestone, shale, loess etc.
  - ✓ organically formed geyserite, chalk, limestone, coal etc.
  - ✓ chemically formed chert, limestone, halite, potash etc..

# 72. Which of the following is an ephemeral river?

- A. Bheri
- B. Vehoa
- C. Luni
- D. None of the above

#### **Answer: C**

#### **Explanation**

- Ephemeral River flow for very short periods.
- Luni is a river in Rajasthan. It originates in the Pushkar valley of the Aravalli Range, near Ajmer, passes through the south eastern portion of the Thar Desert, and ends in the marshy lands of Rann of Kutch in Gujarat, after travelling a distance of 495 km.
- It is first known as Sagarmati, then after passing Govindgarh, it meets its tributary Saraswati, which originates from Pushkar Lake, and from then on it gets its name Luni.

# 73. Which of the following are true about Ocean Currents?

- 1. Patagonia Desert is the result of the cold Falkland current.
- 2. Ocean Currents act as major ocean routes which are followed by the navigating ships.
- 3. The continuous flow of ocean currents is a natural effort to bring a horizontal heat balance.
- 4. A thriving fishing ground along the Peruvian coast is due to the Humboldt Current.

#### Which of the above statements are correct?

- A. 1, 2 and 3 only
- B. 2, 3 and 4 only
- C. 2, 3 only
- D. All

#### Answer: D

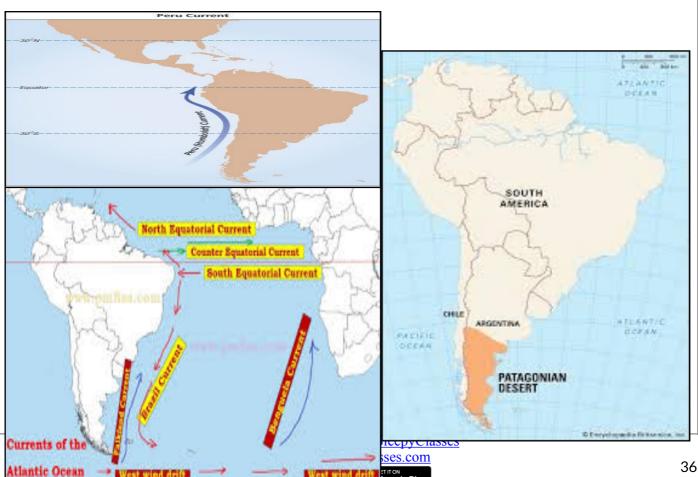
#### **Explanation**

• Unlike warm currents, cold currents do not give rise to moisture laden winds and hence there is no rainfall in the coastal areas. These currents give rise to conditions which are the cause of



desertification in the affected coastal areas. For Example- Kalahari Desert is the result of cold Banguela current, whereas the Patagonia Desert is the result of the cold Falkland current.

- Knowledge of ocean currents is essential in reducing costs of shipping, since travelling with them reduces fuel costs. In the wind powered sailing-ship era, knowledge of wind patterns and ocean currents is even more essential. For Example- Agulhas Current prevented Portuguese sailors from reaching India.
- In recent times, around-the-world sailing competitors make good use of surface currents to build and maintain speed.
- Ocean currents act as the distributing agents of nutrients.
- Oxygen and other elements necessary for the existence and survival of fishes. Ocean currents transport planktons from one area to the other.
- The planktons are useful food for the fishes.
- The favourable conditions for growth of planktons develop where the cold current and warm current meet. For Example- the cold Labrador Current and the warm Gulf Stream current met near Newfoundland where world famous fishing banks like Grand Bank and George's bank have developed.
- The distribution of the anchovy's fishes on the Peruvian coast is too related with the cold Peru or Humboldt Current because it brings planktons for these fishes.
- Upwelling is a process in which deep, cold water rises toward the surface.
- Upwelling brings abundant nutrients close to the surface, and the beneficial effects of sunlight, which allow for rich plankton growth, make the waters off Peru, Chile, and Ecuador one of the world's greatest fishing grounds for anchovies and the larger fish (e.g., tuna) that feed upon them.





## 74. Which is the first step in formation of soil?

- A. Weathering
- B. Erosion
- C. Deposition
- D. Solifuction

#### Answer: A

## **Explanation**

- Soil is formed by the process of 'weathering' of rocks, that is, disintegration and decomposition of rocks and mineral at or near the earth's surface through the actions of natural or mechanical and chemical agents into smaller grains.
- Factors affecting formation of soil may be atmospheric, such as changes in temperatures and pressure; erosion and transportation by wind, water and glaciers; chemical action such as crystal growth, oxidation, hydration, carbonation and leaching by water, especially rainwater, with time.

# 75. Time of the year, not withstanding, we only see same face of the moon every time. What is the reason for it?

- A. Earth rotation time and moon's rotation time is same
- B. Moon's revolution (around earth) and rotation time (around its axis) are same
- C. Time taken by Moon and earth's to revolve around sun is same
- D. Moon has a tilted axis which is naturally aligned to equator

#### **Answer: B**

#### **Explanation**

- Our lunar companion rotates while it orbits Earth. It's just that the amount of time it takes the moon to complete a revolution on its axis is the same it takes to circle our planet about 27 days. As a result, the same lunar hemisphere always faces Earth.
- The moon's gravity slightly warps our planet's shape and gives us tides. Likewise, Earth tugs at the moon, creating a rocky, high-tide "bulge" facing us. That bulge ended up working like a brake, slowing the moon's spin down to the current rate, so the lunar high tide permanently faces u.

## 76. Horse latitudes are characterised by

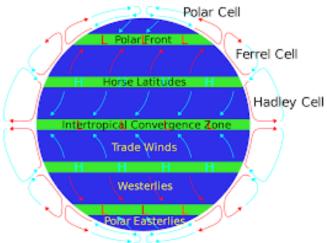
- E. Calm winds and Little precipitation
- F. Rapid winds and Little precipitation
- G. Calm winds and Large precipitation
- H. Rapid winds and Large precipitation

Answer: A



## **Explanation**

• The horse latitudes are subtropical regions known for calm winds and little precipitation. The horse latitudes are regions located at about 30 degrees north and south of the equator.



## 77. Why oceans in northern Hemisphere are warmer than Southern Hemisphere?

- A. Unequal distribution of land and water
- B. Difference in insolation
- C. Tilt of earth axis
- D. Presence of frozen continental mass (Antarctica) in southern Hemisphere

## **Answer: A**

## **Explanation**

- Unequal distribution of land and water Northern Hemisphere the isotherms deviate to the north over the ocean and to the south over the continent. This can be seen on the North Atlantic Ocean.
- The presence of warm ocean currents, Gulf Stream and North Atlantic drift, make the Northern Atlantic Ocean warmer and the isotherms show a poleward shift indicating that the oceans are warmer and are able to carry high temperatures poleward.
- An equator ward bend of the isotherms over the northern continents shows that the landmasses are overcooled and that polar cold winds are able to penetrate southwards, even in the interiors. It is much pronounced in the Siberian plain.

# 78. Which of the following gas is consistently seen to be most abundant in a volcanic eruption?

- A. Hydrogen Sulphide
- B. Carbon Dioxide
- C. Sulphur Dioxide
- D. Water Vapour

#### **Answer: D**

## **Explanation**

• Superheated water vapor is the most common gas released during volcanic eruptions. Water vapor can account for 97 percent or more of total gas emissions from a volcano, but can also be a relatively minor discharge in some volcanoes.



- As volcanic magma molten rock rises to the surface, the pressure on the magma is reduced. Under these conditions, water vapor expands in volume, often with explosive force.
- According to the Volcano Hazards Program of the U.S. Geological Survey, the rapid expansion of water vapor is one of the primary forces that contribute to volcanic explosions.

## 79. As pointed out in Economic Survey 2017-18, what does the term 'feminisation of agriculture' mean

- A. Increased women specific government schemes in agriculture
- B. Predominance of women at all levels of the agricultural value chain from production, pre-harvest, post-harvest processing, and packaging to marketing
- C. Increased tendency of women to take up agriculture over other occupations
- D. Agriculture becoming more and more unskilled labour oriented attracting women

**Answer: B** 

## 80. Which of the following places will not host one of the five strategic oil reserves?

- A. Chandikole (Odisha)
- B. Bikaner (Rajasthan)
- C. Nagpur (Maharastra)
- D. Padur(Kerala)

Answer: C

**Explanation:** Other two are Vizag in Andhra and Mangalore in Karnataka.

## 81. Which of the following statements is <u>incorrect</u> with regard to Loktak Lake?

- 1. The lake is a part of Ramsar convention but not Montreux Record
- 2. It is located in the Barak river system and is known for its unique floating phumdis

# Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. None
- D. Both

Answer: C

- Loktak Lake is the largest freshwater lake in Northeast India and is famous for the phumdis(heterogeneous mass of vegetation, soil and organic matter at various stages of decomposition) floating over it.
- The lake is located near Moirang in Manipur state, India, primarily in Manipur river system, fed by numerous other rivulets.





- The largest of all the phumdis covers an area of 40 km2 (15 sq mi) and is situated on the southeastern shore of the lake. Located on this phumdi, KeibulLamjao National Park is the only floating national park in the world.
- The park is the last natural refuge of the endangered Sangai (state animal). Considering the ecological status and its biodiversity values, the lake was initially designated as a wetland of international importance under the Ramsar Convention on 23 March 1990. It was also listed under the Montreux Record on 16 June 1993.

82. Which of the following wetlands are incorrectly matched with the state in which they are located?

- 1. Kanjili Wetland- Haryana
- 2. Rudrasagar Lake- Tripura
- 3. Sasathamkott Wetland-Tamil Nadu
- 4. TsoMoriri Wetland- Jammu and Kashmir

Which of the above statements are correct?

- A. 1, 3, 4 only
- B. 1 only
- C. 1, 4 only
- D. None

Answer: C

## **Explanation**

- Ramsar is a city in Iran. In 1971, an international treaty for conservation and sustainable use of wetlands was signed at Ramsar.
- The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".
- The Montreux Record is a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference. It is maintained as part of the Ramsar List.

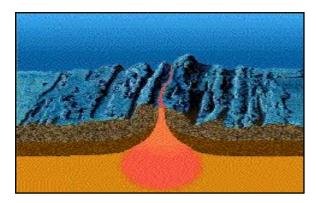
83. Which of the following is a site of crustal formation?

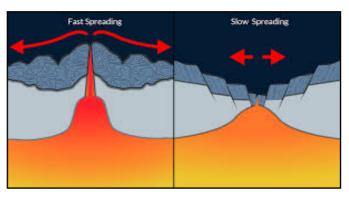
- A. East African Ridge
- B. Pontic Mountains
- C. Mariana Trench
- D. Aleutian Islands

**Answer: A** 



# **Explanation**





- 84. Why outer core is in molten form (intense heat) but inner core remains solid inspite of experiencing higher temperature than outer core?
  - A. Inner core structural components are different
  - B. Pressure is extremely high (inner core) and so is compression
  - C. Inner core is not made of metallic rocks which can be melted
  - D. None of the above

**Answer: B** 

## **Explanation**

- Earth's inner core and outer core are both made of an iron-nickel alloy. The state of matter (solid, liquid or gas) of a given material depends on its temperature and pressure. Most materials, including iron and nickel, change from liquid to solid at lower temperatures and/or higher pressures.
- As you go deeper in the Earth both temperature and pressure increases. Although the inner core is very hot, it is solid because it is experiencing very high pressure. The pressure in the outer core is not high enough to make it solid
- 85. Which among the following methods of heat transfer is maximum responsible for heating of the lower layers of the atmosphere near earth's surface?
  - A. Radiation from Sun
  - B. Radiation from Earth
  - C. Conduction
  - D. Convection

**Answer: B** 

Explanation: All the statements are true. Additionally, 1st Earth Hour was observed in Sydney

- 86. Consider the following statements w.r.t. Population growth
  - 1. Natality refers to the number of births during a given period in the population that are added to the initial density.



- 2. Mortality is the number of deaths in the population during a given period.
- 3. Immigration is the number of individuals of the same species that have come into the habitat from elsewhere during the time period under consideration.
- 4. Emigration is the number of individuals of the population who left the habitat and gone elsewhere during the time period under consideration.

#### Which of the above statements are correct?

- A. 1 and 2 Only
- B. 1, 3 and 4 Only
- C. 1, 3 and 4 Only
- D. All of the above

#### Answer: D

## **Explanation**

W.r.t. Population growth, following definitions are important.

- Natality refers to the number of births during a given period in the population that are added to the initial density.
- Mortality is the number of deaths in the population during a given period.
- Immigration is the number of individuals of the same species that have come into the habitat from elsewhere during the time period under consideration.
- Emigration is the number of individuals of the population who left the habitat and gone elsewhere during the time period under consideration.

### 87. Consider the following w.r.t. greater biological diversity in tropical areas

- 1. They are less seasonal as compared to Tropical areas.
- 2. More solar energy is available in tropical areas.

## Choose the correct option from the following given below

- A. 1 Only
- B. 2 Only
- C. Both 1 and 2
- D. None of the above

#### Answer: C

## **Explanation**

Majorly three reasons are given for greater biological diversity in tropical areas

1. Tropical latitudes have remained relatively undisturbed for millions of years



- 2. They are less seasonal as compared to Tropical areas.
- 3. More solar energy is available in tropical areas.

# 88.In India, which type of forest among the following occupies the largest area?

- A. Montane Wet Temperate Forest
- B. Sub-tropical Dry Evergreen Forest
- C. Tropical Moist Deciduous Forest
- D. Tropical Wet Evergreen Forest

#### Answer: C

#### **Explanation**

- The most extensive of these are the tropical moist deciduous forests. They are forests which flourish in regions with rainfall averaging from 100cm to 200 cm annually. Incidentally, the average annual rainfall in India is 125cm.
- The dominant species of trees in these forests are Shisham, Sal, Teak, Mango, Rosewood etc.

## 89.Isohyet is line joining places having equal

- A. Humidity
- B. Rainfall
- C. Tides
- D. Height or altitude

#### **Answer: B**

#### 90.What is an obsequent river?

- A. The river that joins the consequent river, arising later as erosion proceeds
- B. It does not indicate any particular reason for its pattern and course of flow such as that upon homogeneous terrain.
- C. The river drains in the opposite direction to the original consequent river.
- D. Such rivers drain in the same direction as the original consequent river, but at a lower topographical level

## **Answer: C**

## 91. Which of the following statement(s) are correct?

- 1. The kharif crops include maize, soyabean, and groundnut.
- 2. The rabi crops include barley, oats (cereals), mustard.

# Choose the correct option

A. Only 1



- B. Only 2
- C. Both 1 and 2
- D. None

**Answer: C** 

**Explanation:** The kharif crops include rice, maize, sorghum, pearl millet/bajra, finger millet/ragi (cereals), arhar (pulses), soyabean, groundnut (oilseeds), cotton etc. The rabi crops include wheat, barley, oats (cereals), chickpea/gram (pulses), linseed, mustard (oilseeds) etc

# 92.ASH TRACK app to monitor fly ash has been launched by

- A. Ministry of Environment & Forests
- B. Ministry of Power
- C. MNRE
- D. None of the above

#### Answer: B

**Explanation:** Ministry of Power has launched Web based monitoring System and Fly Ash mobile application named ASH TRACK — enable better management of fly ash produced by thermal power plants by providing interface be-tween ash producers (thermal power plants) and potential ash users such as –cement plants, road contractors etc.

# 93. Which of the following Environmentalists first gave the concept of Biodiversity 'hotspots'?

- A. Gaylord Nelson
- B. Norman Myers
- C. John Muir
- D. Julia "Butterfly" Hil

**Answer: B** 

## 94.Jelep La is in

- A. Jammu and Kashmir
- B. Uttrakhand
- C. Sikkim
- D. Arunachal Pradesh

Answer: C

## 95. Which of the following straits are correctly matched with the water bodies they link?

- 1. Tiran-Gulf of Agaba and Red Sea
- 2. Messina- Tyrrhenian Sea and Ionian Sea



- 3. Mandeb-Gulf of Aden and Red Sea
- 4. Karimata- South China Sea and Java Sea

## Select the correct option

- A. i, ii, iii only
- B. ii, iii only
- C. i,iii, iv only
- D. All

**Answer: D** 

## 96.The International Tropical Timber Agreement (ITTA) has been negotiated under

- A. UNEP
- B. UNDP
- C. UNCTAD
- D. None of the above

**Answer: C** 

**Explanation:** The International Tropical Timber Agreement (ITTA) was negotiated under United Nation Conference for Trade and Development (UNCTAD's) auspices to provide an effective framework for cooperation and consultation among countries producing and consuming tropical timber promote the expansion and diversification of international trade in tropical timber and the improvement of structural conditions in the tropical timber market; promote and support research and development to improve forest management and wood utilization

## 97.Consider the following statements -

- 1. Tides are of great help in navigation and fishing
- 2. High tide enables big ships to enter or leave the harbour safely
- 3. Tide prevents siltation in the harbours.
- 4. Kandla and Diamond Harbour are tidal ports.

# Which of these statements are correct

- A. 1 and 4
- B. 2, 3 and 4 only
- C. 1,2 and 3
- D. All of the above

**Answer: D** 



**Explanation:** Tidal port is the ports in which the water level within the port is subject to change with the ocean tides. It is also a place for where the energy is extracted from the tidal waves which is known as tidal energy. These are mainly found in coastal regions.

# 98.Which one of the following factors is responsible for the change in the regular direction of the ocean currents in the Indian Ocean?

- A. Indian Ocean is half an ocean
- B. Indian Ocean has monsoon drift
- C. Indian Ocean is a land locked ocean
- D. Indian Ocean has greater variation in salinity

**Answer: B** 

Explanation: Due to the monsoon drift of Indian Ocean, its regular direction of the ocean currents changes twice a year.

## 99. Which of following weather circulation cycle called cell is formed within latitude?

- A. Hadley cell
- B. Walker cell
- C. Polar cell
- D. Ferrel cell

Answer: B

## 100. Which of the following states is/are not a part of Western Ghats?

- A. Gujarat
- B. Tamil Nadu
- C. Andhra Pradesh
- D. Both b and c

Answer: C

# 101. National Population Commission is headed by

- A. Prime Minister
- B. Home Minister
- C. Minister of Health and Family Welfare
- D. Deputy Chairman of NITI Aayog

Answer: A

# **Explanation**

• National Population Commission is a commission of the Indian government.



- It was established in 11 May 2000. It is chaired by the prime minister with the Deputy Chairman Planning Commission (now NITI Aayog) as vice chairman. It is chaired by the prime minister.
- Chief Ministers of all states, ministers of the related central ministries, secretaries of the concerned departments, eminent physicians, demographers and the representatives of the civil society are members of the commission.

## 102. World Population Prospects is released by

- A. World Health Organisation
- B. United Nations
- C. World Bank
- D. None of these

#### **Answer: B**

**Explanation:** According to 'The World Population Prospects 2019' published by the Population Division of the UN Department of Economic and Social Affairs, India is projected to surpass China as the world's most populous country by 2027.

## 103. The National Population Stabilisation Fund has been registered as an autonomous society of

- A. Ministry of Home Affairs
- B. Ministry of Human Resource Development
- C. Ministry of Finance
- D. Ministry of Health and Family Welfare

#### **Answer: D**

#### **Explanation**

- The Government of India had set up a National Population Stabilization Fund (NPSF) in the year 2004-05 with a one-time grant of Rs.100 crore in the form of a corpus fund.
- This is now known as Jansankhya Sthirata Kosh (JSK).
- This is an autonomous body registered under the Societies Registration Act, 1860. It has been registered as an autonomous society of the Ministry of Health and Family Welfare.
- JSK has to use the interest on the Corpus and also raise contributions from organisations and individuals that support population stabilisation.

## 104. Kuril islands dispute was in news recently. This is a disputed territory between which 2 countries?

- A. China and Japan
- B. Japan and Russia
- C. North Korea and South Korea
- D. Britain and Argentina



#### **Answer: B**

## 105.FASAL, a farm oriented initiative often in news, is a project related with -

- A. Fast and Speedy Approval of Land Use Change
- B. Facilitating World Class Agro Standards of Land Usage
- C. Forecasting Agricultural Output using Space, Agro-meteorology and Land-based Observations
- D. Familiarising Farmers with Scientific Leaders and their Innovations

#### **Answer: C**

## **Explanation**

- In 1988, Government of India started a project "Crop Acreage and Production Estimation (CAPE)" to collect the statistics of Agricultural Output.
- But to forecast of Crops at sowing stage requires weather data and information of economic factors.
- So "Forecasting Agricultural output using Space, Agro meteorological and Land based observations (FASAL)" was designed.
- The main aim was to collect Monsoon data through remote sensing, economic data and monitoring of crops when growing.
- The programme is sponsored by Ministry of Agriculture.

## 106.Energy saving certificates (ESCert) under PAT Scheme are traded on

- A. Indian Energy Exchange
- B. Power Exchange India
- C. Both A and B
- D. They are not traded on any exchange

#### **Answer: C**

- Perform Achieve and Trade Scheme (PAT) is a component of the National Mission for Enhanced Energy Efficiency (NMEEE) which is one of the eight missions under the National Action Plan on Climate Change (NAPCC).
- NMEEE aims to strengthen the market for energy efficiency by creating conducive regulatory and policy regime and has envisaged fostering innovative and sustainable business models to the energy efficiency sector.
- PAT is a market-based mechanism in which sectors are assigned efficiency targets.
- Industries
- The ESCerts could be traded at two energy exchanges that is Indian Energy Exchange (IEX) and Power Exchange India Limited (PXIL) or bought by other units under PAT who can use them to meet their complaisance requirements.



• Units that are unable to meet the targets either through their own actions or through purchase of EScerts are liable to financial penalty under the Energy Conservation Act.

# 107. Rurban Mission is under which ministry?

- A. Ministry of Housing and Urban Affairs
- B. Ministry of Rural Development
- C. Both A and B
- D. None

## Answer: B

## **Explanation**

- The Government launched the Dr. Shayma Prasad Mukherji RURBAN Mission in 2016 to deliver integrated project based infrastructure in the rural areas under the MoRD.
- The RURBAN Mission aims at providing basic amenities in rural areas and check migration from there to cities.
- The scheme envisages development of economic activities and skill development and helping rural areas get efficient civic infrastructure and associate services.
- The preferred mode of delivery would be through PPPs, while using various scheme funds.
- The Mission will be linked with e-governance and achieve targets in a time bound manner. Best practices of cooperatives, NGOs and other sectors can also be dovetailed into the scheme.

## 108. Which of the following soil types are usually found in Wetlands

- 1. Hydric
- 2. Mesic
- 3. Xeric

## **Select the Correct Option**

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. All

#### **Answer: B**

# 109. Which of the following is a form of condensation?

- 1. Clouds
- 2. Dew
- 3. Fog



## Select the correct answer using the codes given below

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

Answer: D

## **Explanation**

- In free air, condensation results from cooling around very small particles termed as hygroscopic condensation nuclei. Particles of dust, smoke, pollen and salt from the ocean are particularly good nuclei because they absorb water.
- Condensation also takes place when the moist air comes in contact with some colder object and it may also take place when the temperature is close to the dew point.
- Condensation, therefore, depends upon the amount of cooling and the relative humidity of the air.
- Condensation takes place:
- When the temperature of the air is reduced to dew point with its volume remaining constant (adiabatically), when both the volume and the temperature are reduced,
- When moisture is added to the air through evaporation,
- After condensation the water vapour or the moisture in the atmosphere takes one of the following forms — dew, frost, fog and clouds.
- Condensation takes place when the dew point is lower than the freezing point as well as higher than the freezing point

## 110.Ganga Gram' project is launched by

- A. Ministry of Health and Family Welfare
- B. Ministry of Drinking Water and Sanitation
- C. Ministry of Environment, Forest and Climate Change
- D. None

Answer: B

Explanation: Ministry of Drinking Water and Sanitation (MDWS) launched 'Ganga Gram'. It is a project for sanitation based integrated development of all 4470 villages along the River Ganga.

- 111.Recently, Indonesia's President has announced that the country's capital (currently Jakarta) will be relocated to East Kalimantan province on Borneo Island. Choose the correct reasons for the same:
  - 1. Jakarta was built on a marsh, thereby prone to be submerged.



2. Due to climate change, the water levels in the Java Sea are rising and weather events are becoming more extreme.

## **Select the Correct Option**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. None of the above

#### Answer: C

**Explanation:** Recently, Indonesia's President has announced that the country's capital (currently Jakarta) will be relocated to East Kalimantan province on Borneo island.

- Jakarta was built on a marsh, (already a few meters below sea level), thereby prone to be submerged.
- Due to climate change, the water levels in the Java Sea are rising and weather events are becoming more extreme.
- Jakarta is among the world's fastest sinking city.
- Moreover, the Jakarta is the centre for administration, governance, finance and trade, it has inevitably led to relentless construction in the city, due to which the water is not able to seep into the ground in many areas, leading to increased run-off.

## 112.Zawar mines are located in which state:

- A. Rajasthan
- B. Madhya Pradesh
- C. Uttar Pradesh
- D. Maharashtra

## Answer: A

**Explanation:** Zawar is a settlement located in Udaipur District, Rajasthan, India, approximately 40 km from the lake city Udaipur.

It is one of the oldest zinc mines of the world.

### 113. Which of the following are included in Cryosphere?

- 1. Sea Ice
- 2. Glaciers
- 3. Ice Shelves
- 4. Frozen Ground
- 5. Lake Ice

Choose the correct option.



- A. 1, 2, 3 and 5 only
- B. 1, 2 and 3 only
- C. 2 and 3 only
- D. All of the above

**Answer: D** 

**Explanation:** The cryosphere is the frozen water part of the Earth system.

"According to the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the cryosphere, comprising snow, river and lake ice, sea ice, glaciers, ice shelves and ice sheets, and frozen ground, plays a major role in the Earth's climate system through its impact on the surface energy budget, the water cycle, primary productivity, surface gas exchange and sea level and is a fundamental control on the physical, biological and social environment over a large part of the Earth's surface.

## 114.'Asita Project' was in news recently. It is associated with:

- A. Quadrivalent Influenza Vaccine
- B. Yamuna River Front Development
- C. Dead Zone in Gulf of Mexico
- D. Charitable Religious Institutions

Answer: B

**Explanation:** Asita is another name of river Yamuna. Asita, known as Yamuna River Front Development (RFD) project. It aims to restore, revive & rejuvenate river's floodplains & make them accessible to people of Delhi.

### 115.Consider the following statement(s) in the context of Earth's magnetic field

- 1. The magnetic field of earth is due to its solid core.
- 2. The magnetic north pole on the compass is same as the geographic North Pole.

Which of the above statement(s) is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: D** 

#### **Explanation**

Magnetic north pole is drifting from the Canadian Arctic towards Siberia. The pace of the movement
is remarkable and it has left the scientist baffled and increased concerns over navigation, especially in
high latitudes.



• The magnetic north pole or the 'N' on the compass is different from the geographic North Pole. While the latter is in the same place as it always was the latter is never truly stationary as the fluctuations in the flow of molten iron within the Earth's core keep affecting the Earth's magnetic field.

# 116. Which of the following are "non signatories" to 'Nuclear Non-Proliferation Treaty'?

- 1. Pakistan
- 2. India
- 3. China
- 4. Israel

## **Select the Correct Option**

- A. 2,3 and 4 only
- B. 1,3 and 4 only
- C. 1,2 and 4 only
- D. 1,2,3 and 4

#### **Answer: C**

## **Explanation**

- The Treaty on the Non-Proliferation of Nuclear Weapons, commonly known as the Non-Proliferation Treaty or NPT, is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy, and to further the goal of achieving nuclear disarmament and general and complete disarmament.
- Currently only five countries have not signed NPT which are, <u>India</u>, <u>Pakistan</u>, <u>Israel</u>, <u>South Sudan</u> and <u>North Korea</u>.
- Five states are recognized by NPT as nuclear weapon states (NWS): China (signed 1992), France (1992), the Soviet Union (1968; obligations and rights now assumed by the Russian Federation), the United Kingdom (1968), and the United States (1968), which also happen to be the five permanent members of the United Nations.

### 117. The earliest Bombay-Thane train passed through which of the following pass in Western Ghats?

- A. Thal Ghat
- B. Bhor Ghat
- C. Pal Ghat
- D. Sarka Ghat

#### **Answer: B**

## 118.Hogenakkal waterfall is on the river

- A. Shimsha
- B. Bharatpuzha



- C. Kaveri
- D. Tungbhadra

Answer: C

## **Explanation**

- Hogenakkal is a waterfall in South India on the Kaveri River in the Dharmapuri district of the Indian state of Tamil Nadu.
- Sometimes referred to as the Niagara Falls of India

## 119. Which of the following Mountain passes forms the 'tri-junction' of India, China and Myanmar?

- A. Nathu La
- B. Jelep La
- C. Bomdi La
- D. Diphu

Answer: D

#### **Explanation**

- Diphu Pass is a mountain pass around the area of the disputed tri-point borders of India, China, and Myanmar.
- Diphu Pass is also a strategic approach to eastern Arunachal Pradesh.

## 120. Which of the following country is the largest exporter of Milk in the world?

- A. India
- B. Germany
- C. USA
- D. Australia

**Answer: B** 

- India is the world's largest milk producer, with 21 percent of global production, followed by the United States of America, China, Pakistan and Brazil.
- Rcep And India (Dairy Sector)
- Fear of the country being flooded with imports of dairy products from New Zealand and Australia triggered jitters in the dairy sector, which is dominated by small-farmer oriented cooperative sector.
- India's low value of dairy exports may be attributed mainly to high domestic consumption demand for milk and milk products, very low yield of milk output (1.1 tonnes/animal compared to 3.9 tonnes/ animal and 5.9 tonnes/animal for New Zealand and Australia, respectively), and low exportable surplus of processed dairy products due to increasing demand in urban areas.



## 121. Which of the following is/are correct?

- 1. Mahanadi originates in Orissa
- 2. Bhima is one of the tributaries of Mahanadi.
- 3. The world famous Jog Falls are on Kaveri River.
- 4. Kaveri River is also known as Dakshin Ganga.

## **Select the Correct Option**

- A. 1 and 2 only
- B. 3 only
- C. 4 only
- D. None of the above

## **Answer: D**

#### **Explanation**

- Mahanadi originates in Chhattisgarh.
- Bhima is one of the tributaries of Krishna River
- The world famous Jog Falls are on Sharavati River.
- Godavari River is also known as Dakshin Ganga.

## 122. Which of the following gas is consistently seen to be most abundant in a volcanic eruption?

- A. Hydrogen Sulphide
- B. Carbon Dioxide
- C. Sulphur Dioxide
- D. Water Vapour

#### Answer: D

- <u>Superheated water vapor</u> is the most common gas released during volcanic eruptions. Water vapor can account for 97 percent or more of total gas emissions from a volcano, but can also be a relatively minor discharge in some volcanoes.
- As volcanic magma molten rock rises to the surface, the pressure on the magma is reduced. Under these conditions, water vapor expands in volume, often with explosive force.
- According to the Volcano Hazards Program of the U.S. Geological Survey, the rapid expansion of water vapor is one of the primary forces that contribute to volcanic explosions.



# 123. Which of the following places is considered to be the lowest altitude of India within its land boundary?

- A. Cape Comorin
- B. Kibithu
- C. Sir Creek
- D. Kuttanad

#### **Answer: D**

### **Explanation**

• Kuttanad, in Kerala, is 2.2 m below the sea level. It is famous for its paddy cultivation.

#### **Altitudes**

- Highest (undisputed But on Indo- Nepal Border): Kanchenjunga
- Highest: (undisputed and entirely within India): Nanda Devi
- Highest (disputed): K2
- Lowest: Kuttanad

#### **Extreme Points**

Cape Comorin (South - Mainland)

# 124.Recently a referendum was held for independence of Bougainville from Papua New Guinea. Choose the correct statements from the following:

- A. Bougainville islands are a found in Atlantic Ocean.
- B. Geographically the islands of Bougainville are part of the Solomon Islands archipelago.
- C. These islands are politically separate from the independent country of Solomon Islands
- D. The vote is non-binding on the Government of Papua New Guinea.

## Answer: A

#### **Explanation**

#### Conditions to become a nation:

- You must have a defined territory.
- You must have a permanent population.
- You must have a government.
- Your government must be capable of interacting with other states.

## Find out the convention





125. The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. Which of the following cities in India associated with Music?

- A. Jaipur
- B. Hyderabad
- C. Chennai
- D. Lucknow

Answer: C

## **Explanation**

- Jaipur-Crafts and Folk Arts (2015).
- Varanasi-Creative city of Music (2015).
- Chennai-Creative city of Music (2017).
- Mumbai Film (2019).
- Hyderabad Gastronomy (2019).

126. Which of the following mountain peak has never been submitted, in real, because of a tradition of stopping short a few meters before its summit; a tradition followed by every mountaineer?

- A. Mount Everest
- B. Kanchenjunga
- C. Nanga Parbat
- D. Lhotse

**Answer: B** 

# **Explanation**

- Kanchenjunga was first climbed on 25 May 1955 by Joe Brown and George Band, who were part of a British expedition.
- They stopped short of the summit in accordance with the promise given to the Chogyal that the top of the mountain would remain intact.
- Every climber or climbing group that has reached the summit has followed this tradition.

# 127. What of the following best describes the term "functionally extinct"?

- A. It means a species survives only in genetic form
- B. It means a species survives only in a captive environment
- C. It means the species continues to exist but it has too few members to enable to reproduce meaningfully enough to ensure survival
- D. None of the above



## **Answer: C**

## **Explanation**

- International Union for Conservation of Nature (IUCN) Red List has several categories for extinction, or for how endangered a species is. For example, "extinct in the wild" means a species survives only in a captive environment while "locally extinct" means a species has ceased to exist in a particular area but may exist in other areas.
- Then there is "functionally extinct", which means the species continues to exist but it has too few members to enable to reproduce meaningfully enough to ensure survival.
- Tobe "globally extinct", it means a species has no surviving member anywhere. Such a conclusion is reached when there is no reasonable doubt left that its last member has died.

## 128.Consider the following statement(s) in the context of Kolkata Port Trust?

- 1. It has been renamed as Deendayal Port by the current government.
- 2. It is the only riverine major port of India

# 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**

- Prime Minister Modi on January 12 renamed the Kolkata Port Trust after Bharatiya Jana Sangh founder Dr. Syama Prasad Mookerjee, at an event to mark its 150th anniversary. In the early 16th century, the Portuguese first used the present location of the port to anchor their ships, since they found the upper reaches of the Hooghly River, beyond Kolkata, unsafe for navigation.
- The Kolkata port is the only riverine port in the country, situated 203 km from the sea. The river Hooghly, on which it is located, has many sharp bends, and is considered a difficult navigational channel. Throughout the year, dredging activities have to be carried out to keep the channel open.

# 129. Which of the following statement(s) is/are correct in the context of Coastal Regulatory Zone (CRZ) Rules?

- 1. The regulation zone has been defined as the area up to 500 m from the high-tide line.
- 2. The Rules have a no-development zone of 20 m for all islands close to the mainland coast.

## Which of the above statements is/are correct?

- A. 1only
- B. 2only



- C. Both 1 and 2
- D. Neither 1 nor 2

## **Answer: C**

## **Explanation**

- In India, the Coastal Regulation Zone (CRZ) Rules govern human and industrial activity close to the coastline, in order to protect the fragile ecosystems near the sea.
- They restrict certain kinds of activities like large constructions, setting up of new industries, storage or disposal of hazardous material, mining, reclamation and bunding within a certain distance from the coastline.
- After the passing of the Environment Protection Act in 1986, CRZ Rules were first framed in 1991.
- In all Rules, the regulation zone has been defined as the area up to 500 m from the high-tide line. The restrictions depend on criteria such as the population of the area, the ecological sensitivity, the distance from the shore, and whether the area had been designated as a natural park or wildlife zone.
- The latest Rules have a no-development zone of 20 m for all islands close to the mainland coast, and for all backwater islands in the mainland.

#### 130.Choose the correct statement in context of forest fires in Australia

- 1. IPCC report has said that climate change was likely to increase the frequency of fires in Australia
- 2. South-west Australia is the worst affected area by forest fires.

#### Which of the above statements) is/are correct?

- A. 1only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

#### Answer: A

- As far back as 2007, the Intergovernmental Panel on Climate Change (IPCC) had said in its fourthassessmentreport that climate change was likely to increase the frequency of fires in Australia. This has been re emphasized in all recent IPCC reports.
- "In south-east Australia, the frequency of very high and extreme fire danger days is likely to rise by four to 25 per cent by 2020 and 15 to 70 per cent by 2050," the IPCC report had said in its 2007 report. The fiercest fires this season have also been concentrated in south-east Australia. "In both Australia and New Zealand, the fire season length is likely to be extended." the report had said.



- - 1. Earlier, it was part of 'Nagarjuna sagar-Srisailam Tiger reserve' but post-bifurcation, the northern part of the reserve is vested with Telangana state and renamed as 'Amrabad Tiger Reserve'.
  - 2. The area is dominated by Chenchu Tribes.

#### Which of the above are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

#### Answer: C

## **Explanation**

- The Assembly urged the Central Government to withdraw the proposal of Uranium mining in Nallamala Foresting view of the possible threat to the habitation and biodiversity in and around Nallamala due to mining besides public fears of air and water pollution due to Uranium mining.
- On May 22, 2019, the Union Ministry of Environment had granted in-principle approval to the Department of Atomic Energy to survey and explore for uranium in 83 sq km of the Amrabad Tiger Reserve.
- Mining will also effect Chenchu tribal's, who live in the Amrabad forests spread over Telangana Mahbubnagar and Nalgonda district.
- The Nagarjunasagar- Srisailam wildlife Sanctuary attained the Project Tiger status in 1983, and then in 1992, it was renamed as Rajiv Gandhi Wildlife Sanctuary.
- Post bifurcation of the state ,the northern part of the reserve in Telangana state which is called Amrabad Tiger reserve

### **Additional Info**

Nagarjun sagar-Srisailam Tiger Reserve is the largest tiger reserve in India

# 132. Which of the following is matched correctly?

1. Tundra: Mosses and Lichens

2. Savanna: Epiphytes

### Which of the above are correct?

A. Only 1

B. Only 2



- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

## 133. Which of the following geographical features are linked with 'Pat' or called 'Pat lands'?

- A. Plateaus
- B. Mountains
- C. Plains
- D. Islands

Answer: A

## 134. The Dampier-Hodges line is related to which of the following?

- A. Hope Island
- B. Palk Strait
- C. Gulf of Khambat
- D. Sundarbans

Answer: D

## **Explanation**

## What is Dampier-Hodges line?

• It is an imaginary line, passing through 24 Parganas South and North districts, which indicates the northern-most limits of estuarine zone affected by tidal fluctuations.

## 135. Which of the following rocks are known as Plutonic rocks?

- A. Intrusive Igneous Rocks
- B. Sedimentary Rocks
- C. Shallow Rocks
- D. None of the above

Answer: A

Explanation: Plutonic rocks are igneous rocks that solidified from a melt at great depth. Magma rises, bringing minerals and precious metals such as gold, silver, molybdenum, and lead with it, forcing its way into older rocks.

# 136. What is meant by Stranded Carbon?

- A. It refers to fossil fuel energy resources that will never be burnt if the world is to adhere to a given carbon budget.
- B. It refers to fossil fuel energy resources that have been burnt and are present in the atmosphere.





- C. The carbon dioxide that has been geo engineered back into the Earth.
- D. None of the Above

Answer: A

## **Explanation**

- It refers to fossil fuel energy resources that cannot be burnt if the world is to adhere to a given carbon budget.
- Therefore some of proven reserves of fossil fuels will never be burnt and will remain stranded.

## 137. With reference to the term 'Pesticide Treadmill', consider the following statements:

- 1. It means increasing the doses of pesticides to prevent the resurgence of the earlier controlled pest.
- 2. It yields counterproductive results as repeated spraying increase the vulnerabilities of the farming communities to debt and poor health.
- 3. It involves targeted spraying on pests so that no other insects which are harmless or beneficial to the crops get killed.

## Which of the statement(s) given above is/are correct?

- A. 1 and 2 Only
- B. 1 and 3 Only
- C. 2 and 3 Only
- D. All of the Above

#### Answer: A

**Explanation:** The pesticide treadmill is a term indicating a situation in which it becomes necessary for a farmer to continue using pesticides regularly because they have become an indispensable part of an agricultural cycle.

## 138. Which of the following physiographical division of India was once a geosynclinal depression?

- A. Himalayas
- B. Northern Plains
- C. Peninsular block
- D. Coastal plains

**Answer: B** 

#### **Explanation**

• The Himalayan uplift out of the Tethys sea and subsidence of the northern flank of the peninsular plateau resulted in the formation of a large basin. In due course of time this depression, gradually got filled with deposition of sediments by the rivers flowing from the mountains in the north and the



peninsular plateau in the south. A flat land of extensive alluvial deposits led to the formation of the northern plains of India.

• This depression was covered with alluvial deposits brought by Himalayan Rivers.

## 139. Through which of the following north east states in India, the Tropic of Cancer passes?

- A. Tripura and Nagaland
- B. Tripura and Mizoram
- C. Nagaland and Mizoram
- D. Assam and Tripura

**Answer: B** 

## **Explanation**



140. Which among the following ports of India is also known as "Child of Partition"?

- A. Paradip
- B. Kolkata
- C. Kandla
- D. Shaldia

Answer: C

# 141.Choose the correct reasons for differential heating of land and water:

1. Specific heat of water is much greater than the land.



- 2. Oceanic areas are generally clouded and therefore they receive less insolation than land surface.
- 3. Reflection of insolation from the oceanic water surface is far more than from the land surface.
- 4. Opacity of land is high when compared to water.

#### **Select the Correct Code**

- A. 1 and 2 only
- B. 2,3 and 4 only
- C. 1,3 and 4 only
- D. 1.2.3 and 4

Answer: D

# 142.Consider the following statements about the Roaring Forties

- 1. They blow an interrupted in the Northern and Southern hemisphere.
- 2. They blow with great strength and constancy.
- 3. The direction is generally from North West to east in the southern hemisphere.
- 4. Overcast skies rain and raw weather are generally associated with them.

#### Which of these statements are correct?

- A. 1, 2 and 3 only
- B. 2,3 and 4
- C. 1,3 and 4 only
- D. 1,2 and 4

**Answer: B** 

## 143. Recently Triple Billion targets has been in news sometimes related to

- A. WHO
- B. UNEP
- C. UNESCO
- D. UNGC

Answer: A

**Explanation** 

# WHO 'Triple Billion' targets

It aims for:

- 1. One billion more people to be benefitted from Universal Health Coverage (UHC)
- 2. One billion more people to be protected from health emergencies





3. One billion more people to be covered for better health and well-being

# 144.Port Blair is located on which of the following Islands?

- A. South Andaman
- B. Middle Andaman
- C. North Andaman
- D. Great Nicobar

**Answer: A** 

## 145. Tul Bul Project is associated with which of the following rivers?

- A. Indus
- B. Ravi
- C. Jhelum
- D. Beas

**Answer: C** 

# 146. Which of the following is true in context of "Avartansheel Kheti"?

- 1. It insists that farmers should produce food for themselves first and what remains after consumption should be sold in the market.
- 2. It involves dividing the land into zones, for cereal crops, vegetables, fruiting trees and animal husbandry.

### **Select the Correct Option**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: C

- Avartansheel Kheti is based on the philosophy of A Nagraj, who was a proponent of harmonious coexistence.
- It can be translated as 'periodic proportionate farming.'
- It insists that farmers should produce food for themselves first and what remains after consumption should be sold in the market.
- This way, the farmer will never put harmful pesticides and fertilizers if they are growing for themselves.



• It involves dividing the land into zones, for cereal crops, vegetables, fruiting trees and animal husbandry.

## Actual technique

• This technique requires a farmer to divide his land into three parts.

#### Part I

- This part of the farm is required to grow trees, timber, and fruits. The cost of labor required to maintain this part of the land is low.
- The diversity of the crops helps to maintain ecological balance.
- This part of the land also gives the farmer dried leaves which can be later used for creating compost to increase the soil fertility.

#### Part II

- This area in the farm can be used to rear livestock.
- Milk by the cattle can be used by the family and the excess can be used to make products like cottage cheese for higher profits.
- Also, animal dung can be used as manure which reduces the farm's dependence on external chemicals.

#### Part III

- This land is made use of to grow crops for the household.
- Staples like wheat, rice along with pulses, cereals, vegetables, fruits, and spices are grown.
- 147. Which among the following Island of the Andaman & Nicobar islands contains the only known examples of mud volcanoes in India, called locally as 'Jalki'?
  - A. Baratang Island
  - B. Barren Island
  - C. Car Nicobar
  - D. Havelock Island

## **Answer: A**

#### **Explanation**

Baratang contains the only known examples of mud volcanoes in India. These mud volcanoes have erupted sporadically, with recent eruptions in 2005 believed to have been associated with the 2004 Indian Ocean earthquake. The previous major eruption recorded was on 18 February 2003. The locals call this mud volcano jalki.

## 148. Musandam Peninsula is associated with?

- A. Turkey
- B. Oman

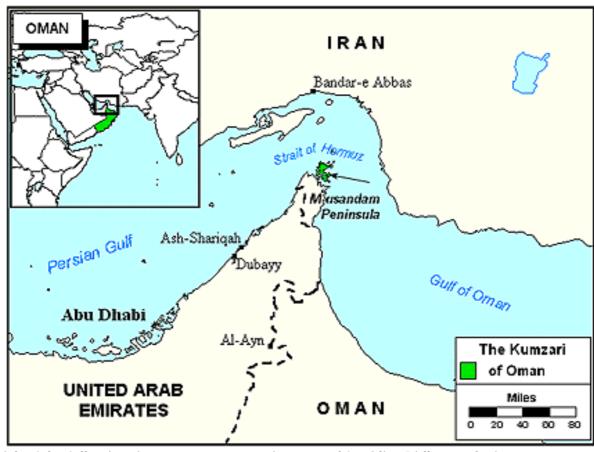


C. Egypt

D. Djibouti

Answer: B

## **Explanation**



149. Which of the following rivers serves as a nesting ground for Olive Ridley turtles?

- A. Devi River
- B. Pennar River
- C. Hughli River
- D. Bhima River

Answer: A

## **Explanation**

Debi river/Devi River is the one of the main distributaries of Mahanadi River. It flows through Odisha and joins Bay of Bengal. It also serves as nesting ground for Olive Ridley turtles.

150.The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. Which of the following cities in India associated with Gastronomy?

A. Jaipur



- B. Hyderabad
- C. Chennai
- D. Lucknow

**Answer: B** 

## **Explanation**

- 1. Jaipur-Crafts and Folk Arts (2015).
- 2. Varanasi-Creative city of Music (2015).
- 3. Chennai-Creative city of Music (2017).
- 4. Mumbai Film (2019).
- 5. Hyderabad Gastronomy (2019).

# 151.Mankidia Tribe recently seen in news are the Particularly Vulnerable Tribal Groups (PVTG) present in which of the following States

- A. Odisha
- B. Rajasthan
- C. Arunachal Pradesh
- D. Kerala

Answer: A

## 152.Conuco, Ray and Masole are associated with which of the following types of cultivation?

- A. Shifting Cultivation
- B. Commercial Farming
- C. Plantation Agriculture
- D. Nomadic Herding

Answer: A

# 153. Which among the following correctly describes the term <u>watershed</u>?

- A. An area drained by a river and its tributaries.
- B. The pattern of flow of water in a river channel over a year.
- C. The boundary line separating one drainage basin from the other.
- D. None of the above

Answer: C



## 154. Which of the following best describes the process of Lithification?

- A. It is process of formation of rocks through compaction of sediments.
- B. It is the process of erosion of rocks and their deposition in deltaic plains.
- C. It refers to the cooling of magma to form lava plains.
- D. It refers to the metamorphosis of rocks under heat and pressure.

Answer: A

# 155. Most of the Jute Mills of India are located in which state

- A. Chhattisgarh
- B. West Bengal
- C. Assam
- D. Orissa

Answer: B

# 156.Kappaphycus alvarezii has been in news recently. Which of the following is true in context with the same?

- 1. It is an invasive seaweed which smothers and kills coral reefs.
- 2. It has recently been found in coral reef areas of Valai island in the Gulf of Manner.

## **Select the Correct Option**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: C

## 157.Consider the following pairs:

Peninsula Country

1. Anatolian Peninsula: Italy

2. Sinai Peninsula: **Egypt** 

3. Kamchatka Peninsula Russia

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

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only





D. 1, 2 and 3

**Answer: C** 

## **Explanation**

Anatolian Peninsula Turkey

Sinai Peninsula Egypt

• Kamchatka Peninsula Russia

# 158. The tribes 'Bedouins' are associated with which of the following climatic region?

- A. Polar
- B. Equatorial rainforest
- C. Desert
- D. Monsoon

Answer: C

## **Explanation**

Bedouin, also spelled Beduin, Arabic Badawi and plural Badw, Arabic-speaking nomadic peoples of the Middle Eastern deserts, especially of North Africa, the Arabian Peninsula, Egypt, Israel, Iraq, Syria, and Jordan

# 159. Identify the crop

- 1. It is a tropical plantation crop.
- 2. 16°-28°C temperature, 150-250cm rainfall and well-drained slopes are essential for its growth.
- 3. It grows on hilly slopes at the height of 900-1800m.
- 4. Low temperature, frost, dry weather for a long time and harsh sunshine are harmful for its plants.

## **Select the Correct Option**

- A. Coffee
- B. Tobacco
- C. Jute
- D. None of the above

#### Answer: A

# **Explanation**

Debi river/Devi river is the one of the main distributaries of Mahanadi River. It flows through Odisha and joins Bay of Bengal. It also serves as nesting ground for Olive Ridley turtles.



# 160.Puncak Jaya is the only place where ice glaciers can be found in Southeast Asia. It is located in

- A. Vietnam
- B. Indonesia
- C. Brunei
- D. Laos

**Answer: B** 

# 161.Global Liveability Ranking is released by

- A. Economic Intelligence Unit
- B. Niti Ayog
- C. World Health Organisation
- D. None of the above

Answer: A

# 162. Which one of the following straits is nearest to the International Date Line?

- A. Malacca Strait
- B. Bering Strait
- C. Strait of Florida
- D. Strait of Gibraltar

**Answer: B** 





# 163.Consider the following:

- 1. Jharia Coal Fields
- 2. Korba Coal Fields
- 3. Umaria Coal Fields

# The correct sequence of the states in which they are located are as follows:

- A. Madhya Pradesh, Jharkhand, Chhattisgarh
- B. Madhya Pradesh, Chhattisgarh, Jharkhand
- C. Jharkhand, Chhattisgarh, Madhya Pradesh
- D. Chhattisgarh, Madhya Pradesh, Jharkhand

#### Answer: C

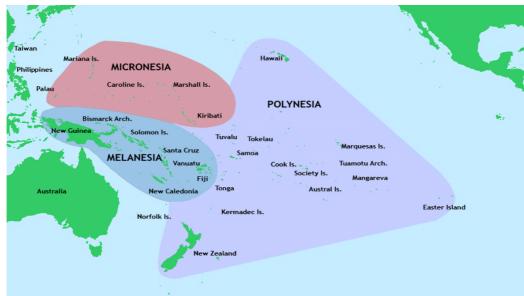
## **Explanation**

- Jharia Coalfield Jharkhand One of the oldest and the richest coalfields of India; store house of the best metallurgical coal
- Korba Coalfield Chattisgarh
- Umaris Coalfield Madhya Pradesh

## 164. Which of the following countries is not a part of Melanesia region in the pacific ocean?

- A. Vanuatu
- B. Solomon Islands
- C. Fiji
- D. Kiribati

### **Answer: D**





## 165.Cape Canaveral; the site from which Space Shuttles are launched is on the coast of (UPSC - 2009)

- A. Florida
- B. Virginia
- C. North Carolina
- D. South Carolina

#### Answer: A

## 166. Which of the following is/are true in context with Cropping Intensity?

- 1. Cropping intensity refers to raising of a number of crops from the same field during one agricultural year.
- 2. The present cropping intensity of 136% in India has registered an increase of only 25% since independence.

## **Select the Correct Option**

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

## Answer: C

#### **Explanation**

- Cropping intensity refers to raising of a number of crops from the same field during one agricultural year; it can be expressed through a formula- Cropping Intensity = Gross Cropped Area / Net Sown Area x 100.
- Around 51% of India's geographical area is already under cultivation as compared to 11% of the world average. The present cropping intensity of 136% has registered an increase of only 25% since independence.

# 167. The India State of the Forest report, published by the Forest Survey of India, included Shannon Wienner Index information.

- 1. Which of the following are incorrect in context with the same?
- 2. This index gives the species richness or diversity of a region.
- 3. It also gives the relative abundance of species.

### **Select the Correct Option**

- A. Only 1
- B. Only 2
- C. Both 1 and 2



## D. Neither 1 nor 2

#### Answer: D

## **Explanation**

- The India State of the Forest report, published by the Forest Survey of India, included Shannon Wienner Index information. This index gives the species richness or diversity of a region. It also gives the relative abundance of species.
- The index for each forest type in all states and UTs was determined

## 168. Which of the following is/are correct?

- 1. In Bangladesh, Brahmaputra is known as Jamuna.
- 2. Brahmaputra and Ganga conjoin to form Meghna in Bangladesh.
- 3. In Bangladesh, Ganga is known as Padma.

## **Select the Correct Option**

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

# **Answer: D**

### 169.The Mahadayi water-sharing dispute is not associated with which of the following states?

- A. Goa
- B. Maharashtra
- C. Karnataka
- D. Tamil Nadu

## **Answer: D**

## 170. Which among the following is the origin of Damodar river?

- A. Greater Himalaya
- B. Kumaon Himalaya
- C. Sahyadri hills
- D. Chota Nagpur Plateau

**Answer: D** 



## 171.Consider the following pairs

Mission **Planet** 

1. BepiColombo Mercury

2. OSIRIS-REx **Neptune** 

3. InSight Mars

# Which of the pairs given above are correctly matched?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1.2 and 3

Answer: B

## **Explanation**

• BepiColombo: Mercury

OSIRIS-REx: Asteriod Bennu

• InSight: Mars

# 172. Which of the following can influence temperature of a place?

- 1. Latitude and Altitude of a place
- 2. Distance of Earth from the Sun
- 3. Ocean Currents
- 4. Prevailing Winds

# Which of the following given above is/are correct

- A. 1, 2 & 3 only
- B. 2,3 & 4 only
- C. 1,3 & 4 only
- D. 1, 2, 3 & 4

Answer: C

## 173. Which of the following is generally not true?

- A. Sugarcane in North India is of the sub-tropical variety and has low sugar content.
- B. Sugarcane in South India is of the tropical variety and high sugar content and high yield.
- C. Sugarcane grows well in hot and humid climate with a temperature of 21°C to 27°C
- D. The crop needs an annual rainfall of more than 200 c.m.





**Answer: D** 

## **Explanation**

# Sugarcane

## **Geographical Conditions of Growth**

- It is a tropical as well as sub-tropical crop. Sugarcane in North India is of the sub-tropical variety and has low sugar content. Also sugar factories have to remain shut in winter seasons in North India. Also, sugarcane juice begins to dry up because of the long dry season in north India.
- Sugarcane in South India is of the tropical variety and high sugar content and high yield. It grows well in hot and humid climate with a temperature of 21°C to 27°C and an annual rainfall of 75-100cm. Medium and heavy soils where irrigation facilities are available are ideal for its cultivation. It can be grown on a variety of soils and needs manual labour from the time of sowing to harvesting. It is a long maturing crop planted between February and April.
- Harvesting begins in October and November. It is a soil-exhausting crop and thus needs regular application of manure or fertilisers.

# **Important Producing Areas**

• The major sugarcane producing states are Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar, Punjab and Haryana.

# 174. The Asian river Mekong does not run through

- A. China
- B. Malaysia
- C. Cambodia
- D. Laos

# Answer: B





The 12th longest river in the world and the 7th longest in Asia, it flows through six countries: China, Myanmar (Burma), Thailand, Laos, Cambodia, and Vietnam.

- 175. When the saturated air mass comes across a mountain, it is forced to ascend and as it rises, it expands; the temperature falls, and the moisture is condensed in the form of rainfall. Which type of rainfall is described above?
  - A. Relief Rainfall
  - B. Convectional Rainfall
  - C. Cyclonic Rainfall
  - D. Monsoonal Rainfall

Answer: A

- 176. The Grand Ethiopian Renaissance Dam has been in news recently. It is associated with:
  - 1. White Nile
  - 2. Blue Nile
  - **Select the Correct Option**
  - A. Only 1
  - B. Only 2
  - C. Both 1 and 2
  - D. Neither 1 nor 2

Answer: B

### **Explanation**

• Ethiopia is building one of the largest dams in the world, the Grand Ethiopian Renaissance Dam (GERD), on the river Nile near the Sudan border. It is a gravity dam on the Blue Nile River in Ethiopia that has been under construction since 2011. It was formerly known as the Millennium Dam and sometimes referred to as Hidase Dam. It will be Africa's biggest hydropower project (6.45 GW) when completed as well as the seventh largest in the world

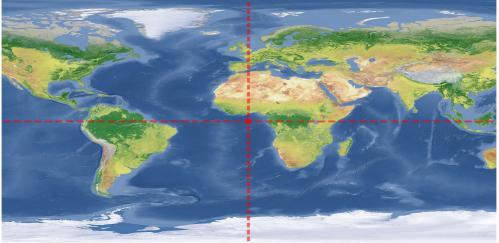
- 177. Which of the following has the intersection of the Prime Meridian and the Equator?
  - A. Gulf of Guinea
  - B. Ghana
  - C. Gabon
  - D. Nigeria

**Answer: A** 



## **Explanation**

Null Island **is** a name for the area around the point where the **prime meridian and the equator** cross, located in international waters in the Gulf of Guinea (Atlantic Ocean) off the west African coast.



178.Arrange the following in the ascending order (shortest to longest duration) on Geological Time Scale?

- A. Epoch-Period-Era-Eons
- B. Eons-Era-Period-Epoch
- C. Epoch-Eons-Period-Era
- D. Era-Period-Epoch-Eons

Answer: A

## **Explanation**

	Eon	Era	Period		Epoch	_ Tadau
0	Phanerozoic	Cenozoic	Quaternary		Holocene	<b>←</b> Today <b>←</b> 11.8 Ka
ı					Pleistocene	- 11.6 Ka
ı			Neogene		Pliocene	
ı					Miocene	
l			Paleogene		Oligocene	
ı					Eocene	
					Paleocene	<b>←</b> 66 Ma
l		Mesozoic	Cretaceous		~	- 00 IVIA
l			Jurassic		~	
			Triassic		~	<b>←</b> 252 Ma
		Paleozoic	Permian		~	
			Carboni-		~	
			ferous	Mississippian	~	
			Devonian		~	
ı			Silurian		~	
ı			Ordovician		~	
ŀ			Cambrian		~	<b>→</b> 541 Ma
	Proterozoic	~	~		~	<b>─</b> 2.5 Ga
	Archean	~	~		~	<b>←</b> 4.0 Ga
	Hadean	~	~		~	4.54 Ga

179. It rises from a spring at Verinag situated at the foot of the Pir Panjal in the south-eastern part of the valley of Kashmir. It flows through Srinagar and the Wular lake before entering Pakistan through a deep narrow gorge. It joins the Chenab near Jhang in Pakistan.

Identify the river:



- A. Indus
- B. Chenab
- C. Jhelum
- D. Ravi

Answer: C

180.Between India and East Asia, the navigation-time and distance can be greatly reduced by which of the following? (UPSC - 2011)

- 1. Deepening the Malacca straits between Malaysia and Indonesia.
- 2. Opening a new canal across the Kra isthmus between the Gulf of Siam and Andaman Sea.

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**

• The first statement in this question requires an explanation. Its worth note that the Malacca strait is the main shipping channel between the Indian Ocean and the Pacific Ocean and links the India, China, Japan and South Korea.





- The issue of deepening of the Malacca strait is "linked" to its economic significance rather than "time of navigation and distance".
- The issue is that most of the ships can not pass through it and the size of the biggest ships which can enter through it is called Malaccamax. Now the deepening of the strait would certainly help in "Increasing the volume of the business" because ships of larger sizes can pass thru it, there is no significance of distance and navigation. So statement 1 is incorrect.