



**VIZAG IAS
ACADEMY**

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PRELIMS TEST SERIES 2023

General Studies

Test - 1

TOPICS COVERED
ECONOMY – Macro Economy
GEOGRAPHY – Fundamentals of Physical Geography
RELATED CURRENT AFFAIRS

1. Consider the following statements with reference to green manure:

1. It refers to decomposed plant matter
2. It helps in controlling growth of weeds
3. They improve soil quality by addition of Nitrogen

Choose the correct statements from the codes given below:

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

Answer: B

Explanation:

Green Manure:

- **Green undecomposed** material used as manure is called green manure. They are also used as cover crops.
- Green manuring is growing in the field plants usually belonging to leguminous family.
- And later incorporating them into the soil after sufficient growth.

Advantages:

- Improves soil structure.
- Increases water holding capacity and
- Decreases soil loss by erosion.
- Reduces weed proliferation and weed growth.
- Reclamation of alkaline soils.



2. Consider the following statements with regard to Heat Dome phenomenon

1. Heat Dome occurs when an area experiences intense low pressure
2. It has severe effect on vegetation, crops and may lead to droughts

Choose the correct statements from the codes given below:

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

Answer: B

Explanation:

Heat Dome:

- Long lasting heat wave conditions due to High pressure formation.
- A heat dome occurs when the high pressure condition traps hot ocean air like a lid or cap.
- Heat dome is more likely to form during La Niña, when waters are cool in the eastern Pacific and warm in the western Pacific.
- The east ward blowing hot wind from the pacific gets trapped in the jet stream system creating a heat dome.

Impact:

- Loss of life, dehydration
- Clear skies, severe sun stroke

- Damage to crops, vegetation
- Droughts
- Increase in wild fires
- Rise in energy consumption

Power outages

Statement 1 incorrect.

- Heat Dome occurs when an area experiences intense high pressure.

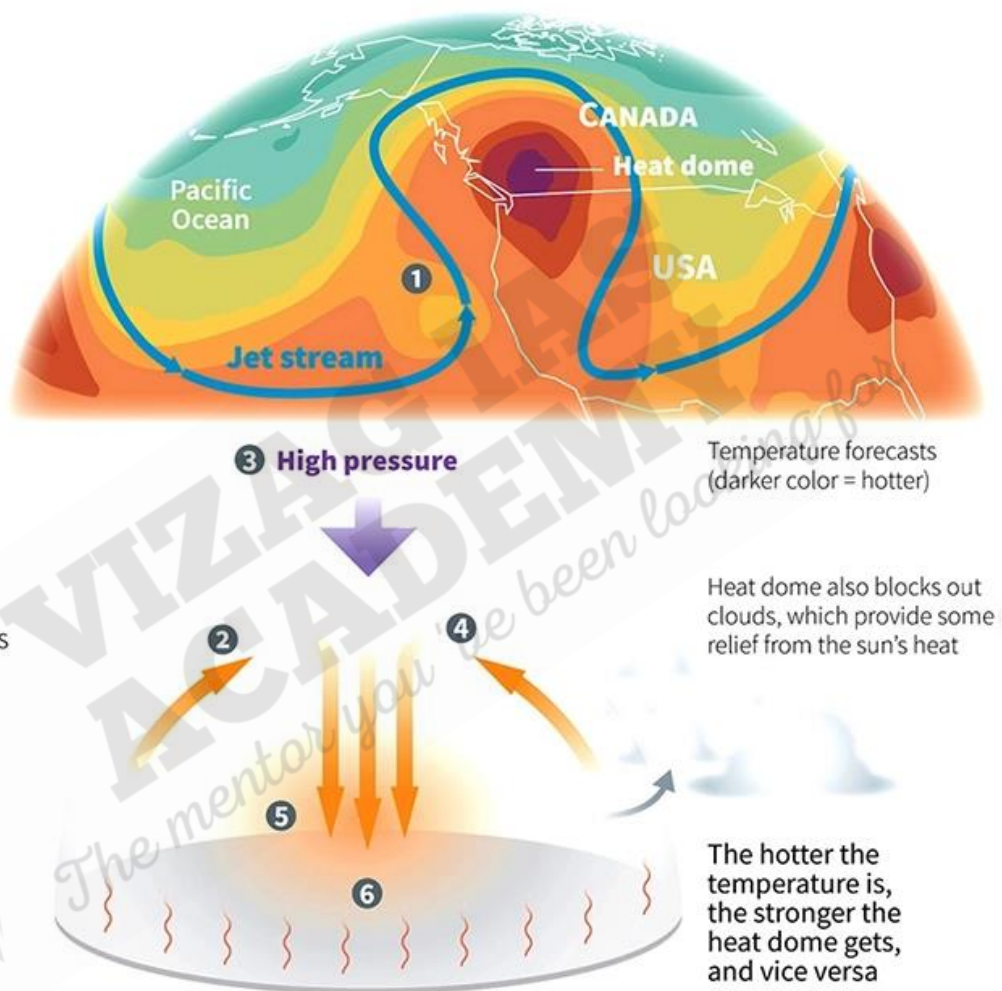
Statement 2 is correct.

- Effect on Vegetation: The trapping of heat can also damage crops, dry out vegetation and result in droughts.

The 'heat dome'

Occurs when the atmosphere traps hot ocean air like a lid or cap

- 1 In summer, the **jet stream** (which moves the air) shifts northward
- 2 Hot and stagnant air expands upwards
- 3 Strong and **high-pressure** atmospheric conditions combine with influences from La Nina act like a dome or cap
- 4 In a process known as **convection**, hot air attempts to escape but high pressure pushes it back down
- 5 Under the dome, the air sinks and **compresses**, releasing more heat
- 6 As winds move the hot air east, the jet stream traps the air where it sinks, resulting in **heat waves**



3. Consider the following statements with reference to Bomb Cyclone

1. Bomb Cyclones are mostly associated with Temperate cyclones
2. They are more prominent in Summer over Winter
3. The pressure at the centre of the cyclone drops at rate of 1 mb/hour for at least 24 hours

Choose the correct statements from the codes given below:

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

Answer: C

Explanation:

Bomb Cyclone:

- A quickly intensifying mid-latitude cyclone / temperate cyclone.
- It's caused by a combination of rapidly dropping pressure and extreme cold.
- This can happen when a cold air mass collides with a warm air mass, such as air over warm ocean waters.
- It occurs when a midlatitude cyclone rapidly intensifies, dropping pressure at least 24 millibars over
- 24 hours.

Statement 1 is correct

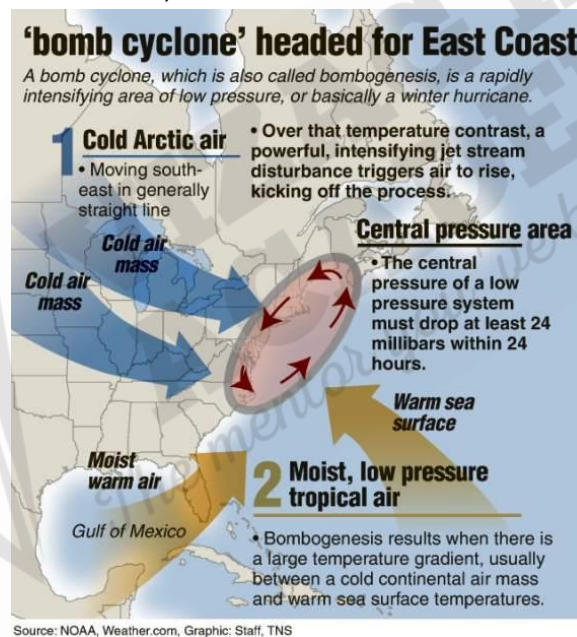
- Bomb Cyclones are mostly associated with Temperate cyclones.
- The US coast is one of the regions where bombogenesis (combination of cyclogenesis) is most common.
- That's because storms in the mid-latitudes – a temperate zone north of the tropics that includes the
- entire continental US – draw their energy from large temperature contrasts.

Statement 2 is incorrect

- Bomb cyclones form during winter.
- Bomb cyclones form from late fall to early spring.

Statement 3 is correct

- The pressure at the centre of the cyclone drops at rate of 1 mb/hour for at least 24 hours.
- Bomb cyclone is a large, intense mid-latitude storm that has low pressure at its centre, weather fronts and an array of associated weather, from blizzards to severe thunderstorms to heavy precipitation



4. Match the following

Term in news	Phenomena
A. Derecho	1. Interaction between two tropical cyclone storms
B. Amalthea	2. Atmospheric conveyor belt for moisture
C. Fujiwhara	3. Straight-line wind storm with rapidly moving showers
D. Pineapple Express	4. Jupiter's moon recently in news

Identify the correct match among the following:

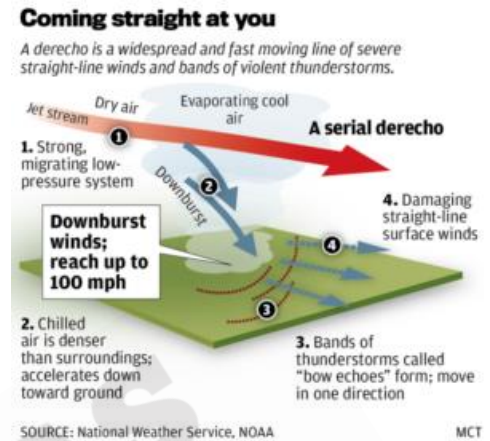
- a) A-4, B-1, C-2, D-3
- b) A-2, B-3, C-4, D-1
- c) A-4, B-2, C-1, D-3
- d) A-3, B-4, C-1, D-2

Answer: D

Explanation:

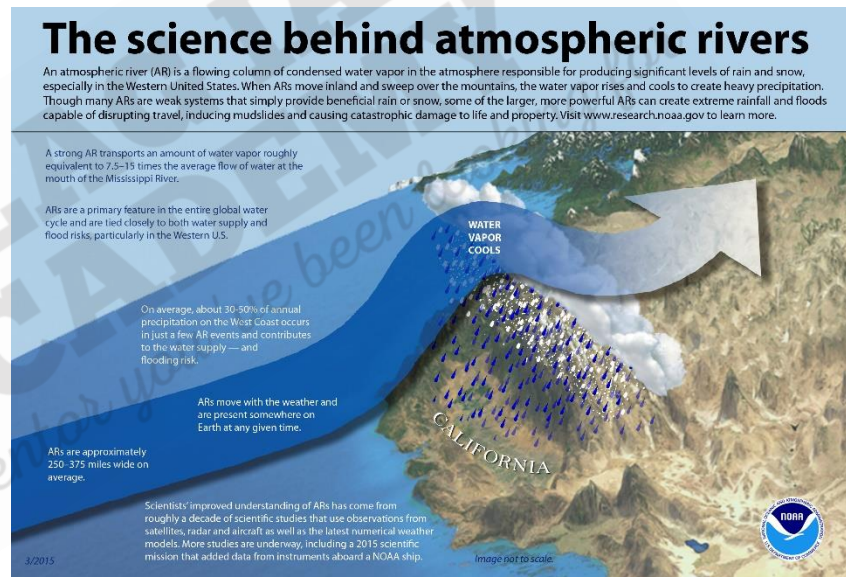
Derecho:

- A Straight-line wind storm with rapidly moving showers.
- A derecho is a widespread, long-lived, straight-line windstorm that is associated with a band of rapidly moving showers or thunderstorms.
- These storms travel thousands of miles without rotation like in a tornado.
- Spanish word 'la derecha' which means 'straight'.
- As the storm hit, it turned the skies green- due to light interacting with the huge amount of water they hold.



Pineapple Express:

- The Pineapple Express is a narrow region of atmospheric moisture that builds up in the tropical Pacific.
- Also called as atmospheric river or conveyor belt of moisture.
- These are narrow regions in the atmosphere that transport much of the moisture from the tropics to northern latitudes.
- Atmospheric rivers are part of the Earth's ocean water cycle.
- Moisture builds up in the tropical Pacific around Hawaii and can wallop the U.S. and Canada's West Coasts with heavy rainfall and snow.



Fujiwhara Effect

- Interaction between tropical storms formed around the same time in the same ocean region.
- The distance between the two centres of cyclone is less than 1,400 km and wind speed more than 63 kmph.
- The effect makes cyclones more unpredictable due to their rapid intensification and change of track, which may lead to large-scale devastation.
- In rare cases, the two systems could merge, especially when they are of similar size and intensity, to form a bigger storm.



Amalthea: Jupiter's satellite in news

- Amalthea appears to radiate out more heat than it receives from the sun.
- Due to Jupiter's magnetic field or from tidal stresses.
- It is the 5th largest moon of Jupiter after the 4 Galilean moons.



5. Match the following:

Type of Drought	Effect
A. Meteorological Drought	1. Low soil moisture
B. Hydrological Drought	2. Abnormal water shortage
C. Agricultural Drought	3. Dried up water bodies
D. Socio-Economic Drought	4. Low rainfall

Identify the correct match among the following:

- A-4, B-3, C-1, D-2
- A-4, B-2, C-1, D-3
- A-3, B-4, C-1, D-2
- A-2, B-3, C-4, D-1

Answer: A

Explanation:

Drought

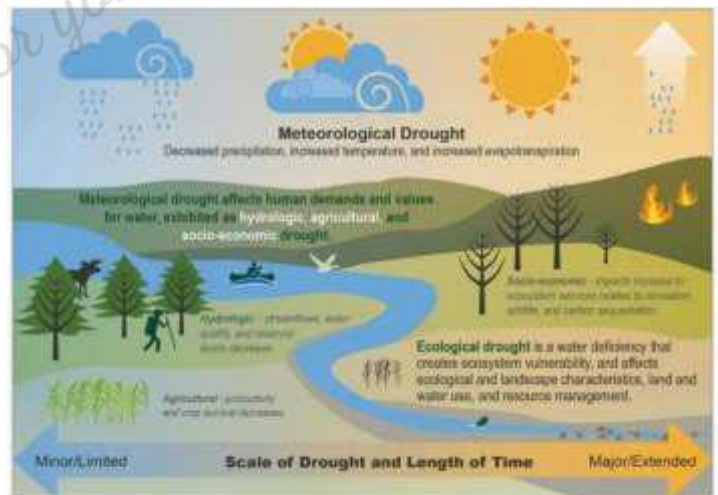
- Drought is a temporary reduction in water or moisture availability below the normal or expected amount for a specific period.
- The occurrence of substantially lower than average precipitation in a season that normally has ample precipitation in a season for the support of cereal and non-cereal crops is known as Drought.

Meteorological Drought

- Meteorological Drought is a situation when there is a prolonged period of inadequate rainfall marked with uneven distribution of the same over time and space. In this, there is a significant decrease from normal precipitation over an area.

Hydrological Drought

- Hydrological Drought results when the availability of water in different storages and reservoirs like lakes, reservoirs, and aquifers falls much below what the precipitation/rainfall can replenish and thus causing a lowering of groundwater levels and drought conditions.



Agricultural Drought

- Agricultural Drought is also known as soil moisture drought and is characterized by low soil moisture that is necessary to support the crops, thereby resulting in crop failures and soil degradation and thus loss of agricultural soil.

Socio-Economic Drought

- It reflects reduced availability of food and income loss due to crop failure.

Authority responsible for declaring drought in India

- The nodal Ministry in respect of monitoring and managing drought conditions is **The Ministry of Agriculture**.
- The designated agent for providing drought early warning and forecasting is **India Meteorological Department (IMD)**. IMD monitors the incidence, spread, intensity, and cessation of droughts.

6. Consider the following statements with reference to cloud burst:

1. A rain event is termed as cloud burst, if 10 mm rainfall is received at a station in 1 hour.
2. It is very difficult to predict the cloud bursts due to its small scale
3. Cloud bursts do not occur at plains

Choose the **incorrect** statements from the codes given below:

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

Answer: C

Explanation:

Statement 1 is **incorrect**:

- If rainfall of about 10 cm or above per hour is recorded over a place that is roughly 10 km in area, it is classified as a cloudburst event.
- 5 cm of rainfall in half an hour would also be classified as a cloudburst. That's an anomaly for Indian conditions.

Statement 2 is **correct**:

- **Forecasting**: The difficulty arises out of the fact that they take place over a very small area.
- Forecasts for a very small area can be done through the use of Doppler radars. Through them, it is possible to forecast the possibility of cloudbursts about six hours in advance, sometimes even 12-14 hours in advance.

Statement 3 is **incorrect**:

- Cloudbursts do happen in plains as well, but there is a greater probability of them occurring in mountainous zones.

7. Which of the pairs given below are matched correctly:

Type of Hydrogen	Generated from
1. Black Hydrogen	Bituminous coal
2. Brown Hydrogen	Lignite coal
3. Grey Hydrogen	Natural Gas
4. Pink Hydrogen	Nuclear Energy

Choose the correct option from the codes given below:

- a) 1, 2 and 3 only

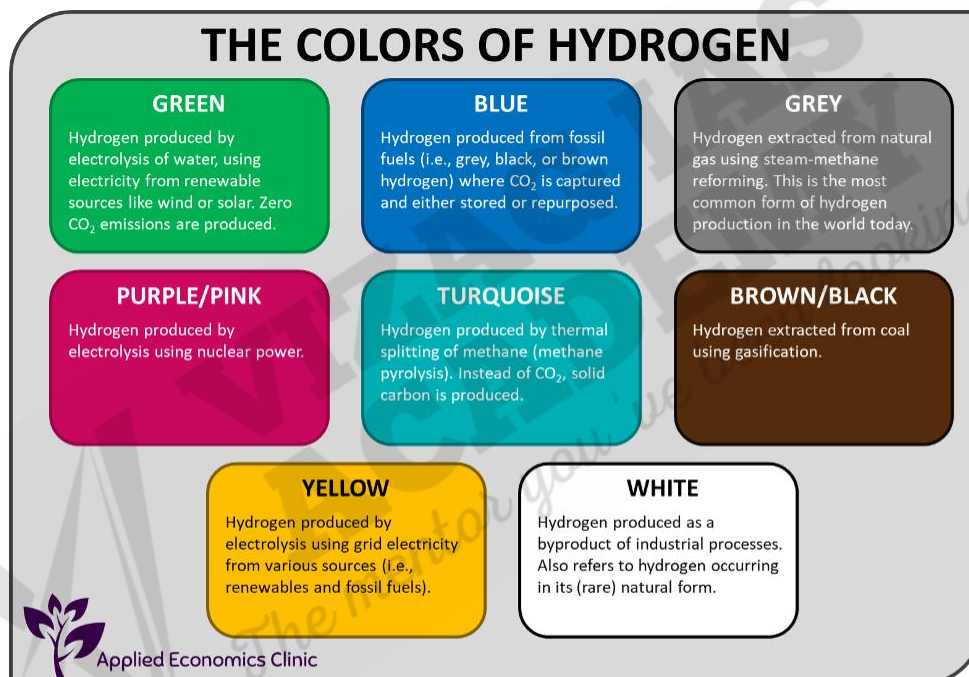
- b) 2, 3 and 4 only
c) 1, 2 and 4 only
d) 1, 2, 3 and 4

Answer: D

Explanation:

	Terminology	Technology	Feedstock/ Electricity source	GHG footprint*
PRODUCTION VIA ELECTRICITY	Green Hydrogen	Electrolysis	Wind Solar Hydro Geothermal Tidal	Minimal
	Purple/Pink Hydrogen		Nuclear	
	Yellow Hydrogen		Mixed-origin grid energy	Medium
PRODUCTION VIA FOSSIL FUELS	Blue Hydrogen	Natural gas reforming + CCUS Gasification + CCUS	Natural gas coal	Low
	Turquoise Hydrogen	Pyrolysis	Natural gas	Solid carbon (by-product)
	Grey Hydrogen	Natural gas reforming		Medium
	Brown Hydrogen	Gasification	Brown coal (lignite)	High
	Black Hydrogen		Black coal	

* GHG footprint given as a general guide but it is accepted that each category can be higher in some cases.



8. Recently Union Government released India's Arctic Policy. Consider the following statements with respect to India's engagement in the Arctic Region

1. India is a full-time observer member in the Arctic Council
2. India presently has one research station only in the Arctic Region
3. IMD is the lead organization for India's Polar research programme

Choose the **incorrect** statements from the codes given below:

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

Answer: A

Explanation:

Arctic Council:

- A High level **intergovernmental forum** that addresses issues faced by the Arctic governments and the indigenous people of the Arctic

- **1991-** 8 Arctic countries signed Arctic Environmental Protection System
- **1996- Ottawa Declaration:** established Arctic Council for cooperation, coordination, and interaction among Arctic States, indigenous communities and Arctic inhabitants
- **Members:** Canada, US, Russia, Norway, Sweden, Finland, Denmark, Iceland
- **UNCLOS** is applicable in the Arctic
- The Arctic Council **does not prohibit** the commercial exploitation of resources in the Arctic.
- It only seeks to ensure that it is done in a sustainable manner.



India's engagement in the Arctic

- **2007-** India's first scientific expedition to Arctic
- **2008-** India's first research station 'Himadri' at Svalbard
- **2013-** India was first granted the **Observer** status
- **2014-** IndArc India's underwater observatory
- **2019-** India re-elected as Observer for 5 years
- **National Centre for Polar and Ocean Research, Goa** is the lead organization for polar research program-
- **PACER Scheme-** Polar Science & Cryosphere Research: Arctic Research + Antarctic Research + Cryosphere & Climate Change Research
- India's interests in the Arctic region are scientific, environmental, commercial as well as strategic



9. Consider the following statements with reference to 'aftershocks' of an earthquake
1. Aftershocks happen due to readjustment of tectonic plates after the main earthquake
 2. Aftershocks can be seen up to weeks or years after the main earthquake
 3. Aftershocks can be of more magnitude than the main earthquake

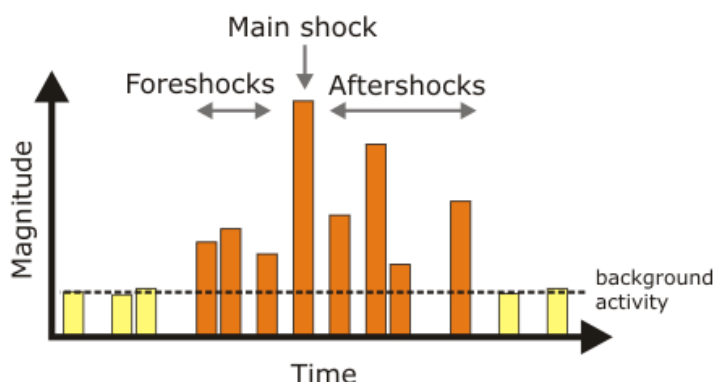
Choose the correct statements from the codes given below:

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

Answer: A

Explanation:

- Aftershocks are a sequence of earthquakes that happen after a larger mainshock on a fault.
- Aftershocks are part of the "readjustment process" after the main slip on the fault.
- While they become less frequent with time, they can continue for days, weeks, months, or even years for a very large mainshock.
- In Turkey, significant damage that has followed the original quake has been a result



of aftershocks. With the main earthquake already weakening structures, aftershocks have sent many buildings tumbling.

Statement 1 is correct:

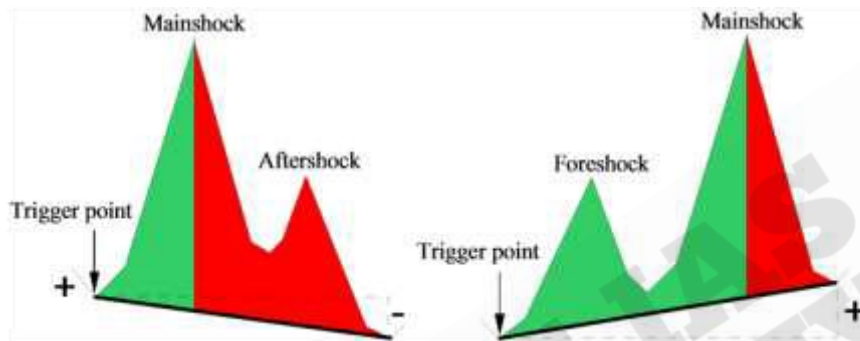
- Aftershocks are a sequence of earthquakes that happen after a larger mainshock on a fault.
- The Earth wants to get back to some type of equilibrium, and that is the process that produces aftershocks.

Statement 2 is correct:

- In general, the larger the mainshock, the larger and more numerous the aftershocks, and the longer they will continue.

Statement 3 is incorrect:

- Aftershocks are weaker than the main seismic event but they are strong enough to cause the damage



10. Beaufort number is used to indicate

- a) Intensity of flood level
- b) Intensity of heat wave
- c) Intensity of wind speed
- d) Intensity of cold wave

Answer: C

Explanation:

- Beaufort scale, also known as “**Beaufort wind force scale**”.
- Beaufort numbers in the Beaufort scale are arranged from 0 to 12 to represent the wind strength from calm (force 0) to the hurricane (force 12).
- The scale extended from further 13 to 17 in 1946. But it only used in Taiwan and Mainland China.

11. Which of the following reasons could be responsible for Joshimath Land Subsidence:

1. Located in Seismic Zone I
2. Located on unconsolidated sediments
3. Undercutting by rivers
4. Construction activities
5. Widening roads & tunnels
6. Hydroelectric projects
7. Withdrawal of ground water

Choose the correct option from the codes given below:

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

Answer: D

Explanation:

What is land subsidence?

- Gradual settling or sudden sinking of the Earth's surface due to the removal or displacement of sub-surface earth materials.

General Causes of Land Subsidence:

- It includes aquifer-system compaction associated with groundwater withdrawals, drainage of organic soils and underground mining.
- Also caused by natural events such as earthquakes, soil compaction, glacial isostatic adjustment, erosion, sinkhole formation, and adding water to fine soils deposited by wind.

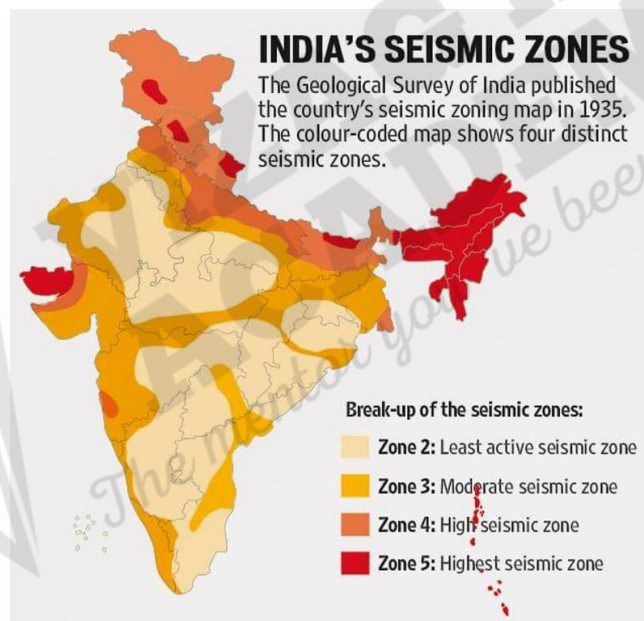
Why is Joshimath witnessing exaggerated land subsidence

Geographical and Geological factors

- It falls in Zone V of seismic zonation map. Being on fault line, making it vulnerable to sinking.
- Comprises of gneissic rocks, which are highly weathered and low cohesive value with a tendency of high pore pressure when saturated with water.
- Floods in June 2013 and 2021 adversely impacted the landslide zone.
- Mountain streams with their changed course induces slope instability.

Human factors

- Hydro power activities like NHPC's Tapovan Vishnugad Project.
- Unplanned construction of Char Dham road between Helang and Marwari and the Joshimath-Auli ropeway.



12. The Aral Sea fast shrinking due to multiple anthropogenic factors is often in news. Consider the following statements regarding Aral Sea:

1. It is bordered by Kazakhstan, Uzbekistan and Turkmenistan
2. Rivers Amu Darya and Syr Darya drain into the Aral Sea

Choose the correct statement/s from the codes given below:

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

Answer:

Explanation: B

Statement 1 is incorrect

- Kazakhstan, Uzbekistan are the only border countries to ARAL SEA.

Statement 2 is correct

- Amu Darya and Syr Darya rivers, where the first one reaches the body of water through the South, while the second reaches through the North.

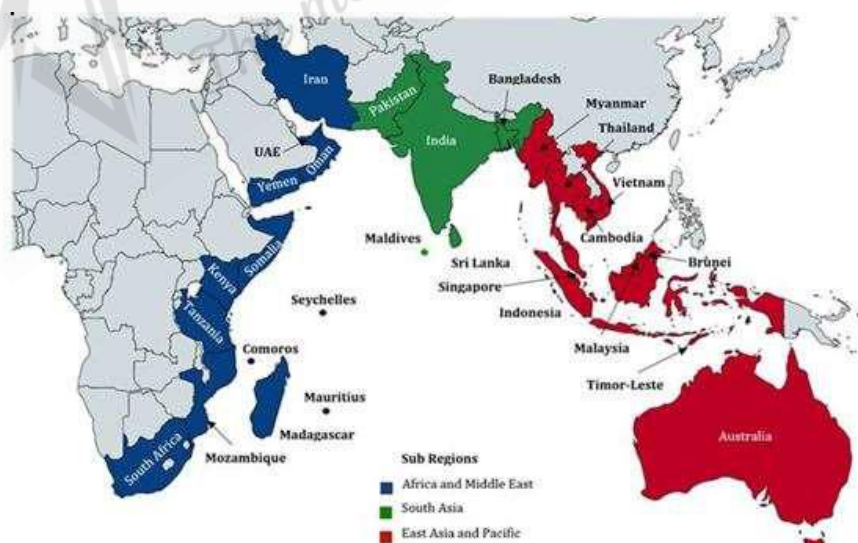


13. Choose the correct order of arrangement of Islands of the Indian Ocean from North to South

- a) Maldives-Socotra-Reunion-Mauritius-Seychelles
- b) Socotra- Seychelles- Maldives- Reunion-Mauritius
- c) Socotra-Maldives-Seychelles-Mauritius-Reunion
- d) Maldives-Socotra-Mauritius-Seychelles-Reunion

Answer: C

Explanation:



चित्र: हिंद महासागर क्षेत्र

14. Arrange the following ports from West to East

1. Gwadar Port
2. Chabahar Port
3. Hambantota Port
4. Duqm Port

Select the correct code from below:

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

Answer: B

Explanation:



15. Which of the following Seas are marginal seas of the Arctic Ocean

1. Kara Sea
2. North Sea
3. Beaufort Sea
4. Barents Sea

Select the correct code from below:

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

Answer: D

Explanation:



16. Consider the following statements regarding British Commonwealth of Nations:

1. Gabon is the recent most countries to have joined Commonwealth
2. There are no European countries in the Commonwealth

Choose the correct statement/s from the codes given below:

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

Answer: A

Explanation:

The Commonwealth of Nations is an association of independent sovereign states, most of which are former colonies of the United Kingdom.

- Maldives became 54th member to join
- Recently **Gabon and Togo** small western African countries joined as 55th and 56th members
- Only 3 countries from Europe are members- **Cyprus, Malta & United Kingdom**
- Africa- 21 countries
- The Americas- 13 Countries
- Pacific- 11 Countries
- Asia- 8 countries

Statement 1 is correct:

- Most recent members to join were the Francophone African nations of Gabon and Togo on 29 June 2022.

Statement 2 is incorrect:

- Three European nations are part of the Commonwealth: Cyprus, Malta, and of course, the UK itself.

17. Consider the following statements regarding Earthquake Waves:

1. All natural earthquakes take place in the lithosphere.
2. Body waves are first generated at the Epicentre and move in all the directions.
3. The S wave propagation reveals that the inner core is made of liquid.
4. P- Waves propagate longitudinally while S-Waves propagate transversally.

Which of the above statements are correct?

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

Answer: B

Explanation:

Statement 1 is correct

- Mostly earthquake occurs when lithospheric plates also called the tectonic plates (floating on the upper partially molten mantle) either collide or break due to their collision causing immense shaking or vibration of the crust.

Statement 2 is incorrect:

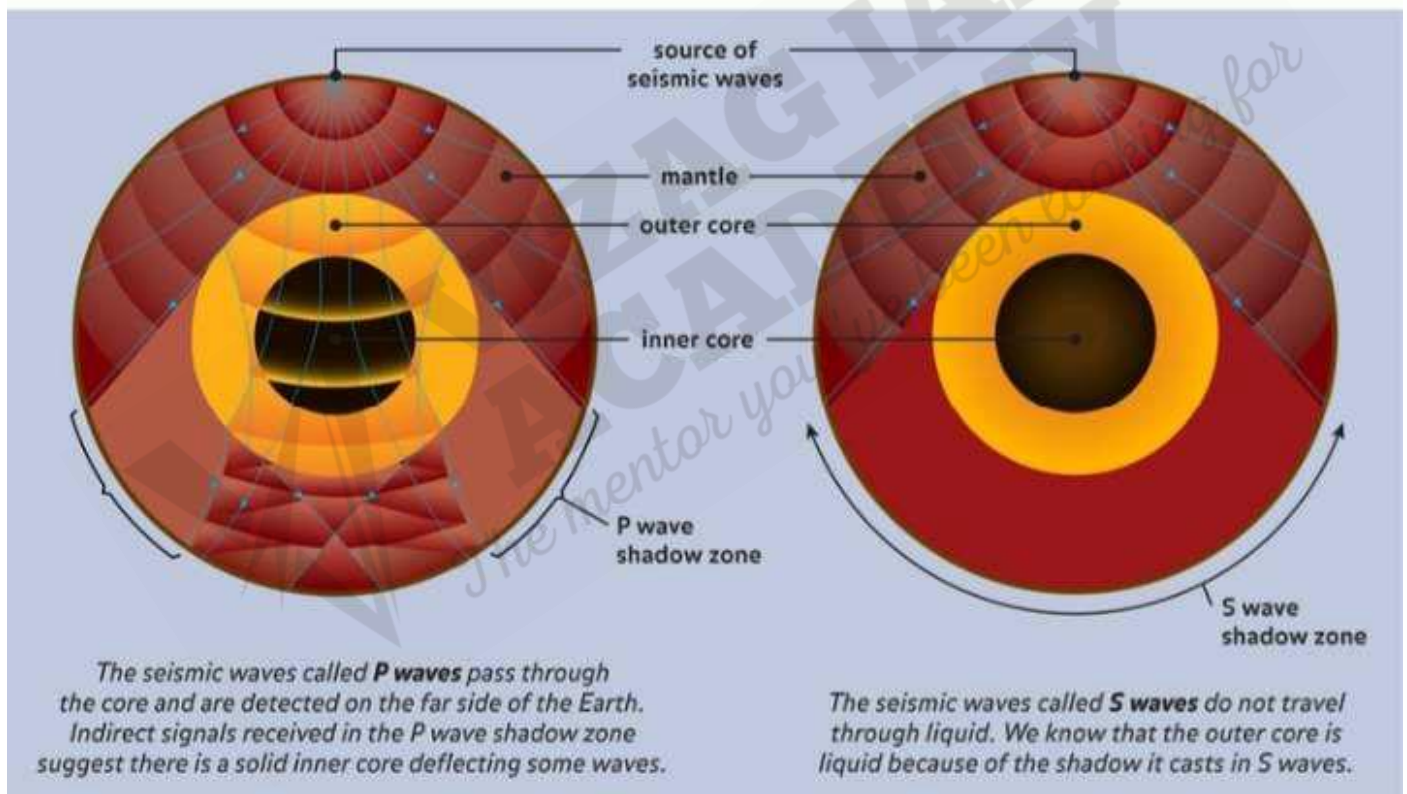
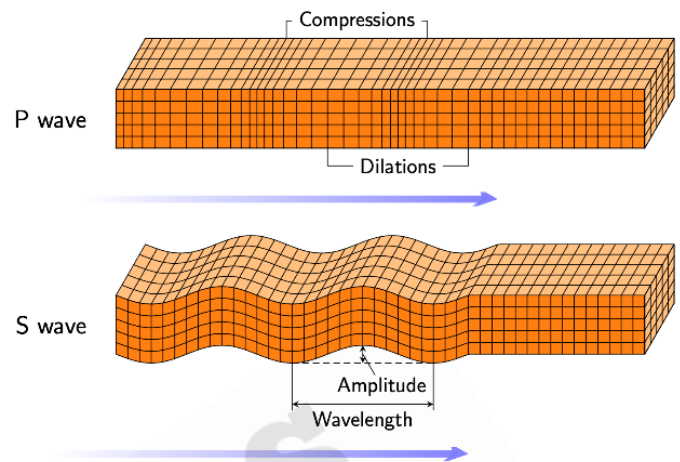
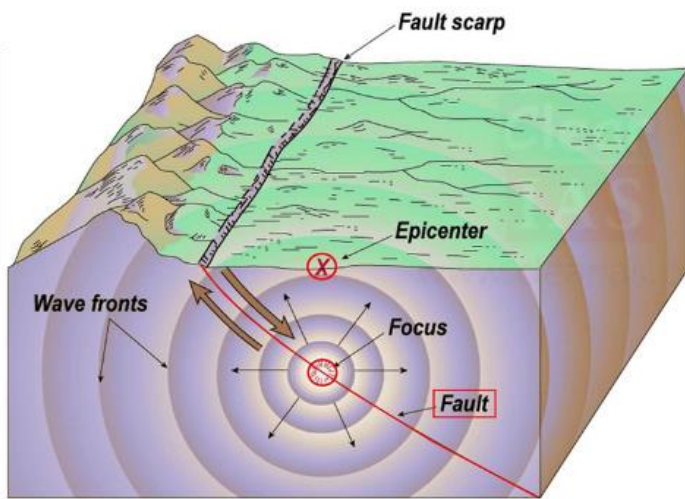
- Body waves are first generated **at the focus** and moves in all directions.
- Body waves are of two types - P waves and S waves.

Statement 3 is incorrect:

- S waves only travel through solids. P waves can travel through liquid and solids and gases.
- But earth's inner core is made up of solid.

Statement 4 is correct:

- P-waves, or primary waves, are longitudinal, where the earth compresses and stretches in the direction of wave propagation. ✓ S-waves, or secondary waves, are transverse, where the earth moves up and down as the wave travels.



18. Which of the following observations neither supports nor goes against the claims made by the big bang theory regarding the origin of the universe?

- Hubble's theory, farther the galaxy is, faster it is moving away
- Detection of gravitational waves
- Continuous birth and death of new stars
- Discovery of cosmic microwave background

Answer: C

Explanation:

Evidences that support big bang theory.

Redshift of Galaxies:

- The light we observe from galaxies has been stretched by the time it reaches us. This redshift is the result of galaxies moving away from us.

Microwave Background:

- When the universe formed long ago it left heat as a glow, this glow is nothing but microwave light. Mixture of Elements
- Hubble's discovery in the 1920s of a relationship between a galaxy's distance from Earth and its speed; and the discovery in the 1960s of cosmic microwave background radiation.

19. Consider the following features of Mass Movement?

- Mass movements are favoured by torrential rainfall and scarcity of vegetation
- Geomorphic agents do not have active role in Mass Movement
- Weathering is a pre-requisite for mass movement to happen

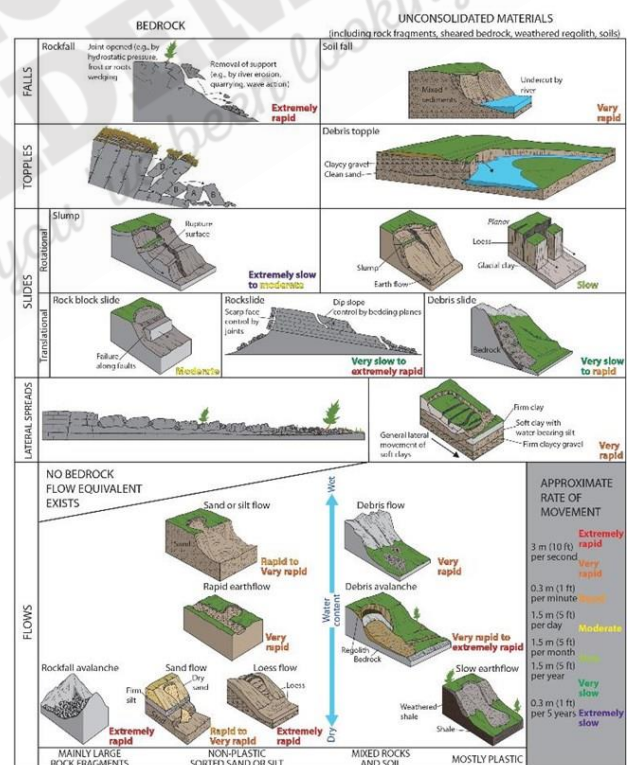
Which of the above statements are correct?

- 1 and 2 only
- 1 and 3 only
- 2 and 3 only
- 1, 2 and 3

Answer: A

Explanation:

- 300-meter-long slump that occurred in an area of thawing permafrost (2004). Noatak National Preserve, Alaska.
- Mass wasting is the movement of rock and soil down slope under the influence of gravity. Rock falls, slumps, and debris flows are all examples of mass wasting. Often lubricated by rainfall or agitated by seismic activity, these events may occur very rapidly and move as a flow. Landslide triggers may include:
 - Intense rainfall
 - Rapid snowmelt
 - Earthquake
 - Volcanic eruption
 - Stream or coastal erosion
- The runout of a mass wasting event depends on the volume of material, water content, and slope steepness.



20. Which of the following statements are correct?

- An area drained by a river and its tributaries is best referred as Catchment area
- Drainage basin is when a river collects the water from specific area to a common point
- The catchments of large rivers are called river basins while those of small rivulets are referred to as watersheds.

Select the correct answer using the codes given below:

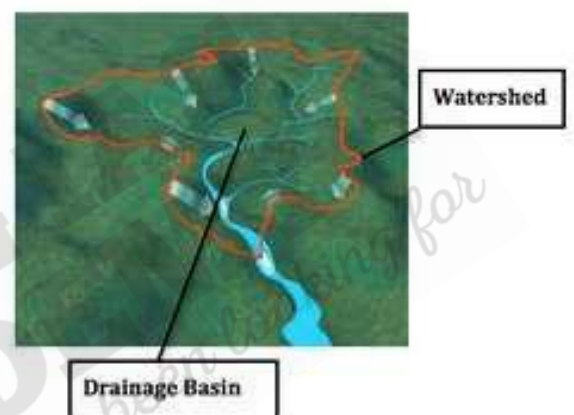
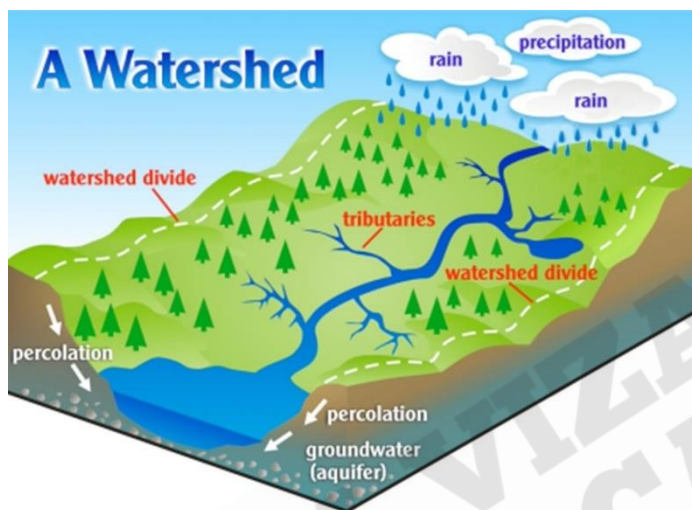
- 1 and 2 only

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

Answer: C

Explanation:

- A river drains the water collected from a specific area, which is called its 'catchment area'.
- An area drained by a river and its tributaries is called a drainage basin. The boundary line separating one drainage basin from the other is known as the watershed.
- The catchments of large rivers are called river basins while those of small rivulets and rills are often referred to as watersheds.
- There is, however, a slight difference between a river basin and a watershed. Watersheds are small in area while the basins cover larger areas. River basins and watersheds are marked by unity. What happens in one part of the basin or watershed directly affects the other parts and the unit as a whole. That is why, they are accepted as the most appropriate micro, meso or macro planning regions.



21. Consider the following statements regarding Drainage Pattern:

1. The drainage pattern is referred to be "centripetal" when the rivers originate on a hill and flow in all directions.
2. The drainage pattern resembling the branches of a tree is known as 'trellis'.

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: D

Explanation:

Drainage: The flow of water through well-defined channels is known as 'drainage' and the network of such channels is called a 'drainage system'.

Drainage Pattern: It refers to the system of flow of surface water mainly through the forms of rivers and basins.

- The drainage system depends upon factors such as slope of land, geological structure, amount of volume of water and velocity of water.

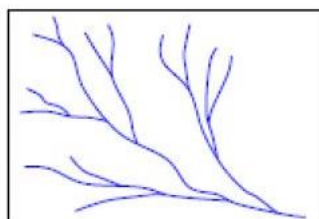
Statement 1 is incorrect:

- When the rivers originate from a hill and flow in all directions, the drainage pattern is known as 'radial'.

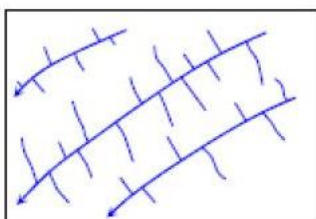
- Centripetal is just the opposite of the radial as streams flow toward a central depression.
- During wetter portions of the year, these streams feed ephemeral lakes, which evaporate away during dry periods.

Statement 2 is incorrect:

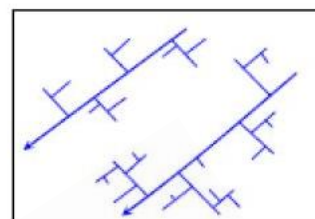
- The drainage pattern resembling the branches of a tree is known as “dendritic”.
- It is the most common form and resembles the branching pattern of tree roots.
- The dendritic pattern develops where the river channel follows the slope of the terrain.
- Trellis drainage develops in folded topography where hard and soft rocks exist parallel to each other.



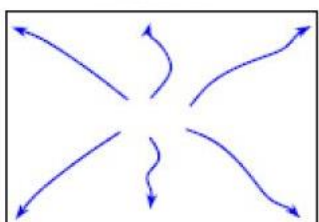
Dendritic



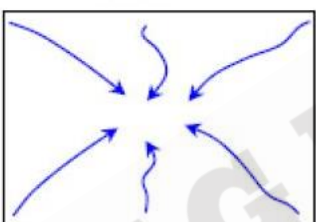
Trellis



Rectangular



Radial: centrifugal



Radial: centripetal



Annular

22. Match the following:

Source Rock	After Metamorphism
A. Slate	1. Quartzite
B. Clay	2. Gneiss
C. Granite	3. Phyllite
D. Sandstone	4. Schist

Select the correct answer using the code given below:

A B C D

- 3, 4, 1, 2
- 4, 3, 2, 1
- 3, 4, 2, 1
- 4, 3, 1, 2

Answer: C

Explanation:

- Metamorphism is a process by which already consolidated rocks undergo recrystallisation and reorganization of materials within original rocks.
- Metamorphism occurs when rocks are forced down to lower levels by tectonic processes or when molten magma rising through the crust comes in contact with the crustal rocks or the underlying rocks are subjected to great amounts of pressure by overlying rocks.

Metamorphic Rock	Texture	Comments	Parent Rock
Slate		Composed of tiny chlorite and mica flakes, breaks in flat slabs called slaty cleavage, smooth dull surfaces	Shale, mudstone, or siltstone
Phyllite		Fine-grained, glossy sheen, breaks along wavy surfaces	Shale, mudstone, or siltstone
Schist		Medium- to coarse-grained, scaly foliation, micas dominate	Shale, mudstone, or siltstone
Gneiss		Coarse-grained, compositional banding due to segregation of light and dark colored minerals	Shale, granite, or volcanic rocks
Marble		Medium- to coarse-grained, relatively soft (3 on the Mohs scale), interlocking calcite or dolomite grains	Limestone, dolostone
Quartzite		Medium- to coarse-grained, very hard, massive, fused quartz grains	Quartz sandstone
Hornfels		Very fine-grained, often exceedingly tough and durable, usually dark colored	Often shale, but can have any composition

23. Which of the phenomena given below indicate an El-Nino condition?

1. Westward blowing trade winds weaken along the Equator
2. Increase in the temperature of the water on the Peruvian coast
3. Abundance of plankton and hence fishing in the Eastern Pacific

Select the correct answer using the codes given below:

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

Answer: B

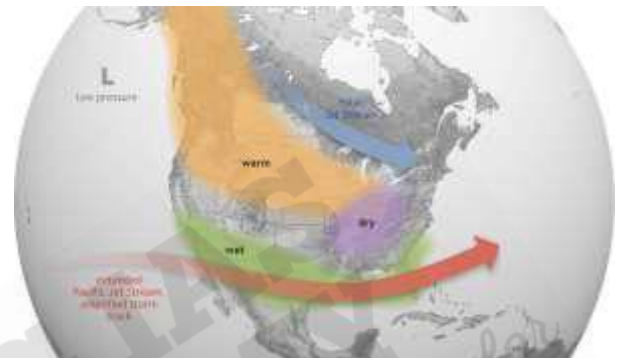
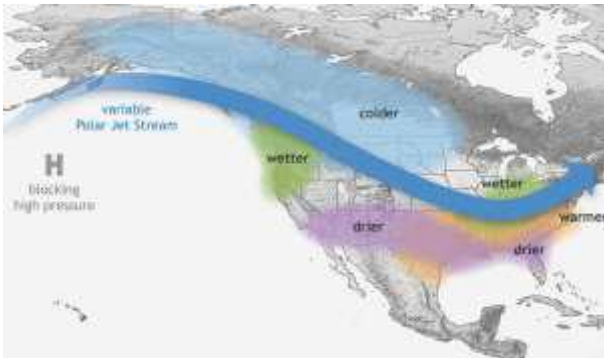
Explanation:

- El Niño and La Niña are two opposing climate patterns that break these normal conditions. Scientists call these phenomena the El Niño-Southern Oscillation (ENSO) cycle. El Niño and La Niña can both have global impacts on weather, wildfires, ecosystems, and economies.

La Nina	El Nino
The Trade winds become stronger than normal	The Trade winds weaken in the western Pacific
Trade winds cause warmer waters in the west	Trade winds cause warmer waters in the East
The sea surface temperature reduces across the Eastern pacific by 3-5 °c	The sea surface temperature increases across the Eastern Pacific by 6-8 °c
La Nina events occur half the amount of time El Nino events do	El Nino events occur every 3-7 years
Enhanced upwelling of nutrient rich waters increasing fish populations along S. America coast	Reduced upwelling of deep nutrient rich water leads to reduction in fish populations along S. America coast

Conditions of El-Lino:

- El Niño also has a strong effect on marine life off the Pacific coast.
- During normal conditions, upwelling brings water from the depths to the surface; this water is cold and nutrient rich.
- During El Niño, upwelling weakens or stops altogether. Without the nutrients from the deep, there are fewer phytoplankton off the coast.
- This affects fish that eat phytoplankton and, in turn, affects everything that eats fish.
- During El Niño, trade winds weaken. Warm water is pushed back east, toward the west coast of the Americas.
- **Westward blowing trade winds weaken along the Equator.**
- **El Lino occurs due to changes in surface temperature of the Pacific Ocean off the coast of Peru,**



24. Assertion(A): Earth experiences the highest temperature in the subtropics rather than at the Equator
Reason(R): Subtropical areas have longer day hours in the summer than the Equatorial

Select the correct answer using the codes given below:

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true.

Answer: B

Explanation:

- Earth experiences the **highest temperature in the subtropics rather than at the Equator** is correct
Because
- The **cloud cover present in the skies of the equator helps in reducing the amount of sunlight falling on the earth surface**, which is mostly absent in the skies of sub-tropical areas causing most of the sunlight to fall on the surface.
 - Also, at the equator, most of the sunlight is used in evaporating water from seas and other water bodies, rather than increasing the actual temperature of the region.
 - While in the sub-tropical zone, this absorption of sunlight decreases because of fewer water bodies as compared to the equatorial region which ultimately causes more sunlight to be absorbed by the earth surface.
 - Here, air also plays a vital role. The warm air of the equator drains the maximum of its moisture in the clouds in equatorial regions and continues to rise.
 - This warm and dry air now begins to move towards the pole but due to the Coriolis force, it whirls closer to the surface in the tropics and sub- tropics.
 - During its descent, the air becomes hotter and increases its temperature and ultimately, increases the temperature of land.
- Hence, the earth experiences the highest temperatures in the subtropics in the northern hemisphere rather than at the equator.

25. Consider the following statements regarding Condensation:

1. The temperature of air reaches dew point only when Relative Humidity is 100%
2. For Dew to form, the dew point needs to be above 0 degree C
3. Mist has greater moisture than Fog
4. Fog has a greater visibility than Mist

Select the correct answer using the codes given below:

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

Answer: B

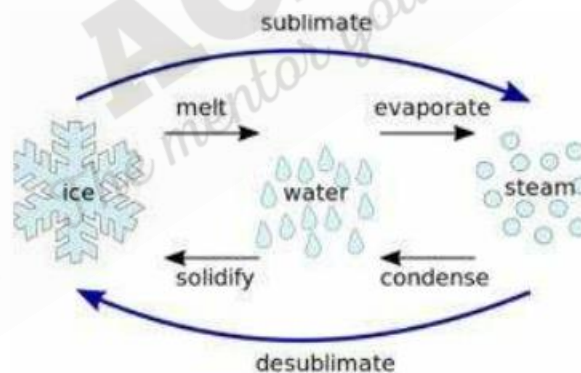
Explanation:

The transformation of water vapour into water is called condensation.

- Condensation is caused by the loss of heat (latent heat of condensation, opposite of latent heat of vaporization).
- When moist air is cooled, it may reach a level when its capacity to hold water vapour ceases (Saturation **Point = 100% Relative Humidity = Dew Point reached**). Then, the excess water vapour condenses into liquid form. If it directly condenses into solid form, it is known as sublimation.

The forms of condensation can be classified on the basis of temperature at which the dew point is reached.

- Condensation can take place when the dew point is lower than the freezing point, higher than the freezing point that is **above 0°C**
- When the temperature of an air mass containing a large quantity of water vapour falls all of a sudden, condensation takes place within itself on fine dust particles is known as fog.
- So, the fog is a cloud with its base at or very near to the ground. Because of the **fog and mist, the visibility becomes poor to zero.**



The difference between the mist and fog is that mist contains more moisture than fog.

- In mist each nuclei contains a thicker layer of moisture.
- Mists are frequent over mountains as the rising warm air up the slopes meets a cold surface.
- Mist is also formed by water droplets, but with less merging or coalescing. **This means mist is less dense and quicker to dissipate.**

26. Which of the following statements regarding ITCZ are correct?

1. It is a zone of intense low pressure referred to as Thermal Equator
2. It aids in the development of Monsoon Trough during South West Monsoon
3. It facilitates the onset of North East Monsoon by reversal of winds

Select the correct answer using the codes given below

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

Answer: D

Explanation:

- The ITCZ is a zone of convergence at the thermal equator where the trade winds meet. It is a low pressure belt and migrates with the changing position of the thermal equator.
- The Inter Tropical Convergence Zone (ITCZ,) is a broad trough of low pressure in equatorial latitudes.
- This is where the northeast and the southeast trade winds converge. This convergence zone lies more or less parallel to the equator but moves north or south with the apparent movement of the sun.
- Intertropical convergence zone (ITCZ) is generally located near the equator, almost parallel to it. It
- moves north or south of the equator with the apparent movement of the sun. As the Sun moves south or north of the equator, the ITCZ shifts south or north. The ITCZ is also referred to as “**monsoon trough**”, during the monsoon season.

27. Consider the following statements

1. The annual range of temperature is greatest over Mid-latitudes
2. The diurnal range of temperature is least over Equator

Which of the above statements are correct?

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

Answer: C

Explanation:

Difference between diurnal range of temperature and annual range of temperature:

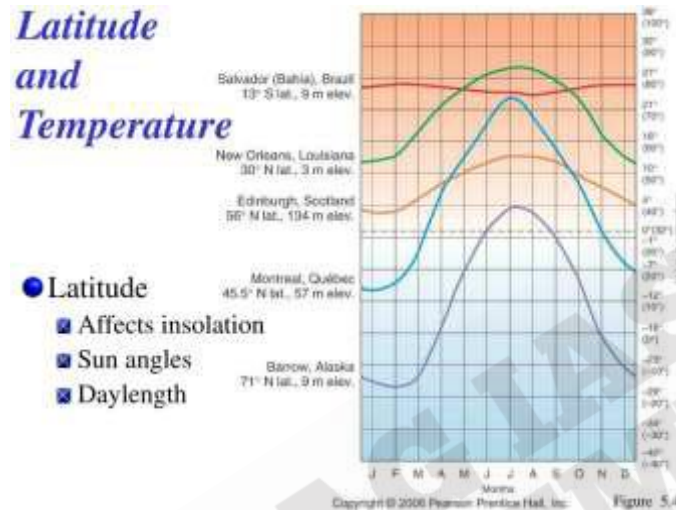
DIURNAL RANGE	ANNUAL RANGE
• The difference between the daily maximum and minimum temperature is called Diurnal range of temperature	• The difference between the hottest and coldest months, taking monthly mean temperatures in each case is called the annual range of
• Changes in this kind of temperature have multiple possible causes (cloud cover, urban heat, land-use change, aerosols, water vapour and greenhouse gases).	• Changes in this kind of temperature have multiple possible causes that depend on the regions where the temperatures are being measured
• In the Thar desert, the day temperature may rise to 50°C and drop down to near 15°C the same night.	• The annual range of temperature is greater in the Northern Hemisphere than that in the Southern Hemisphere

Statement 1 is correct:

- At midlatitudes the mid-ocean temperatures vary about 8 °C (14.4 °F) over the year. At the polar latitudes the surface temperature remains near the freezing point of seawater, about -1.9 °C (28.6 °F). Land temperatures have a large annual range at high latitudes because of the low heat capacity of the land surface.

Statement 2 is correct:

- The Equator has a constant 12-hour day throughout the year. The seasonal range of temperature consequently decreases from high latitudes to the tropics, where it becomes less than the diurnal range of temperature.



28. Consider the following statements regarding Coriolis Force:

- Coriolis Force is directly proportional to angle of latitude
- It acts perpendicular to the pressure gradient force
- It strengthens the wind speed as we move towards poles

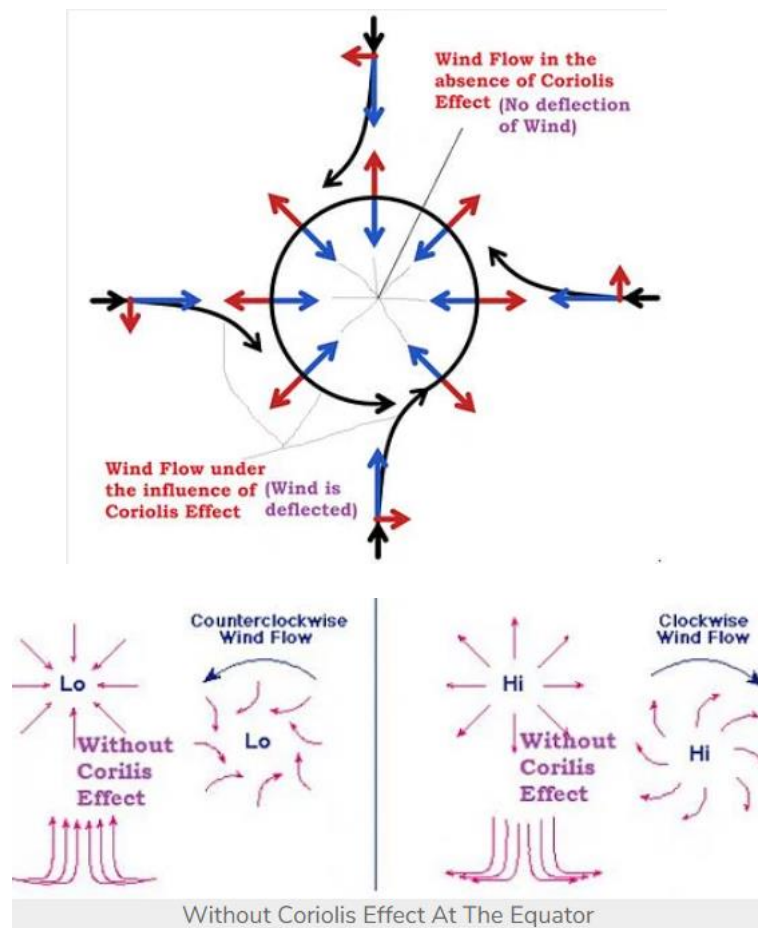
Which of the above statements are correct?

- 1 and 2 only
- 1 and 3 only
- 2 only
- 1, 2 and 3

Answer: D

Explanation:

- The Coriolis force, which is caused by the earth's rotation about its axis, influences the wind's direction. It is directly proportional to the latitude angle. In the southern hemisphere, it deflects the wind to the left, and in the northern hemisphere, it is to the right.
- The Coriolis force is directly proportional to the angle of latitude. It is maximum at the poles and is absent at the equator.
- At the equator (Coriolis force is zero) wind blows perpendicular to the isobars. The low pressure gets filled instead of getting intensified i.e., there is no spiralling of air due to zero Coriolis effect. The winds directly get uplifted vertically to form thunderstorms.



Statement 2 is correct

- The Coriolis force acts perpendicular to the pressure gradient force (**pressure gradient force is perpendicular to an isobar**) As a result of these two forces operating perpendicular to each other, in the low-pressure areas the wind blows around it (cyclonic conditions).

Statement 3 is correct

- The Coriolis Effect is zero at the equator and increases to a maximum at the poles. The effect is proportional to wind speed; that is, deflection increases as wind strengthens.

29. Match the following:

Type of Biome	Soil Characteristics
A. Equatorial Forest	1. Thin soil cover
B. Desert	2. Acidic, poor in nutrients
C. Tropical Savannah	3. Rich in nutrients with little organic matter
D. Boreal	4. Porous with thin layer of humus

Choose the correct answer from the codes given below:

A B C D

- 4, 1, 3, 2
- 2, 3, 4, 1
- 2, 4, 1, 3

d) 3, 4, 1, 2

Answer: B

Explanation:

Equatorial Rainforest Climate- Soil

- The majority of the soil is deficient in nutrients.
- At the surface, a thin layer of fertile soil forms as the dead leaves decay.
- It is reddish in colour due to its high iron content.
- Poor in nutrients, Nutrients are quickly flushed out of the soil due to excessive rains.

Desert soils are thin, sandy, rocky and generally grey in colour.

- **Desert soils are very dry** when it does rain, they soak up the water very quickly.
- The surface of the soil may appear crusty. This is due to the lack of rainfall. As it is so hot, water is drawn up to the surface of the soil by evaporation. As the water evaporates, salts are left behind on the surface of the soil.
- **Tropical Savannah** and its soil is Porous with thin layer of humus
- **Boreal Soils** - Sand, loamy sand, and sandy loam soils are typically moderately acid to neutral, but heavier soils (e.g., silty loam and clay loams) and more acid and alkaline conditions are also found. Boreal forests that occur over bedrock or cobble are often characterized by shallow organic soils or mor humus.

30. Consider the following statements regarding Mechanical Weathering:

1. Exfoliated Domes and Exfoliated Tors are developed due to expansion from unloading and pressure release
2. Exfoliation Dome is a large, smooth, dome-shaped rock masses
3. Exfoliated Tors are smooth surfaced, rounded small to big boulders

Which of the above statements are correct?

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

Answer: B

Explanation:

Mechanical weathering is also known as physical weathering. In this type of weathering, a large rock is disintegrated into smaller pieces of rocks. When rocks disintegrate or break up without experiencing any change in their chemical composition, it is known as mechanical weathering.

There are some types of mechanical weathering:

- Freeze-thaw weathering or Frost Wedging
- Exfoliation weathering or Unloading
- Thermal Expansion
- Abrasion and Impact
- Salt weathering or Haloclasty

Some of the factors that are responsible for mechanical weathering are:

- Growth of plants on the rock.
- Temperature and pressure changes in nature
- Freezing and thawing of water in cracks of the rock.
- Formation of salt crystals within the rock.
- Burrowing by animals.

Statement 1 is incorrect:

- Exfoliation domes and tors are formed due to physical weathering processes. >> Exfoliation domes are large and smooth rounded domes formed due to unloading and expansion of rocks

Statement 2 is correct:

- Exfoliation domes are large and smooth rounded domes formed due to unloading and expansion of rocks. In this process overlying rock load is removed due to continuous erosion and as a result there is a release of vertical pressure

Statement 3 is correct

- Rocks which are formed from such exfoliation are granites, smooth surfaced and rounded small to big boulders called tors

Exfoliation domes	Exfoliated tors
It results in a vertical pressure release.	More than the internal ones, the outer layers expand.
The outer layers of the rock are exposed to constant erosion in the case of an exfoliation dome	Exfoliation tor is created due to a massive difference in temperature. The numerous minerals of the outer layer of the internal movement are caused by this diurnal change in temperature.

31. Tibetan Plateau can be best categorized as:

- a) Piedmont Plateau
- b) Volcanic Plateau
- c) Continental Plateau
- d) Intermontane Plateau

Answer: D

Explanation:

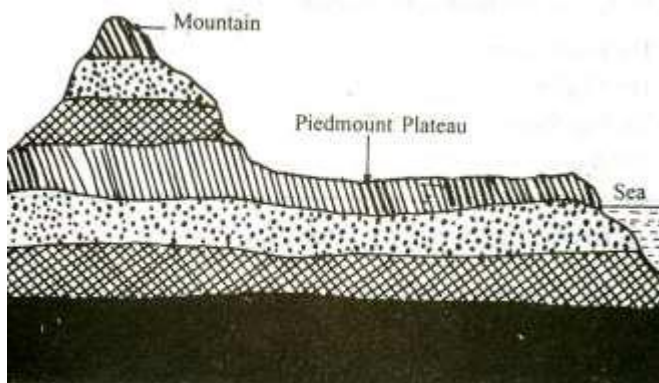
Piedmont Plateau:

- The plateaus that are situated at the foot of the mountains and are bounded on other sides by a plain or an ocean are called the piedmont plateau.

Example: The plateau of Malwa in India and Appalachian situated between the Appalachian Mountain and the Atlantic Coastal Plain in U.S.A.

Volcanic Plateau:

- A volcanic plateau is a plateau produced by volcanic activity.
- There are two main types:** lava plateaus and pyroclastic plateaus.



Continental Plateaus:

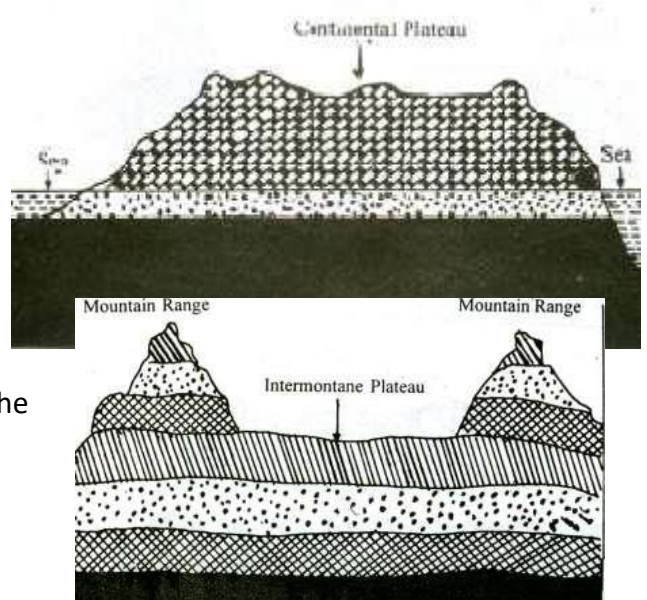
- These are formed either by an extensive continental uplift or by the spread of horizontal basic lava sheets completely covering the original topography to a great depth.

Example: The volcanic lava covered plateau of Maharashtra in India, Snake River Plateau in North West.

Intermontane Plateaus:

- The plateau which is bordering the fold mountain range or are partly or fully enclosed within them are the intermontane plateaus.

Example: Tibet is surrounded by folded mountains like Himalaya, Karakoram, Kunlun, Tien Shah on its two sides.



32. Regarding the Equatorial Climate, which among the following statements is/are **incorrect**:

- There is no typical winter
- There is rain in every month
- Epiphytes are a feature of this type of climate.
- The rainfall peaks twice coinciding with Solstices

Choose the correct answer from the codes given below

- 1 and 2 only
- 4 only
- 2 and 4 only
- 1, 2 and 3 only

Answer: B

Explanation:

Equatorial climate, also called tropical wet climate or equatorial rainforest climate, is found mostly between 50 north and south of equator, with largest extent in Amazon, Congo, Malaysia and East Indies.

Characteristic features of equatorial climate:

- Temperature is uniform throughout the year with mean temperatures around 27°C
- Heavy precipitation, no winter and small diurnal & annual range of temperature.
- Rainfall distributed throughout the year and absence of any dry season.
- Vegetation is tropical rain forest and the growing season is all the year round.
- Vegetation comprises of tropical hardwoods like Mahogany, Ebony, etc.
- The canopy is thick and presence of epiphytes is a characteristic feature.

33. Consider the following statements:

- A dry, warm summer with offshore trade winds.
- Rainfall in winter with on-shore westerlies.

Which of the following climate type best suits the above characteristics?

- Laurentian
- British
- China
- Mediterranean

Answer: D

Explanation:

Laurentian:

- It is characterized by cold, dry winters and hot, humid summers. Winter temperatures are much lower than the freezing point, and the snow is very deep. Summers are as hot as the tropics (21° – 27 C), and summer becomes hotter without the cooling effects of off-shore cold currents in the Arctic.

British

- The Britain type of climate is a mild climate. It is in a temperate climate zone, and the weather is influenced by the sea. Rainfall is common throughout the year. They experience cool, rainy winters and warm, rainy summers.

China

- Dry seasons and wet monsoons characterise the climate of the southern portions of Japan, resulting in large temperature differences between winter and summer.

Mediterranean

- The Mediterranean climate has hot and dry summers and mild-wet winters. The natural vegetation of this biome adapted according to the dry and hot summer conditions.
 - Warm temperate western margin climate also called as Mediterranean climate.
 - Dry, warm summer with off-shore trade winds.
 - Concentration of rainfall in winter with on-shore westerlies.
 - Drought resistant Xerophytic plants in an environment deficient in moisture.
 - Wide range of Citrus fruits are grown here.
 - Mediterranean-type climate regions occur roughly between 30° and 40° latitude on the west coasts of continents, where offshore there are cold ocean currents.

34. Regarding the Extra Tropical Cyclones, consider the following statements:

1. The isobars are widespread and hence pressure gradient is gentle
2. Since they are formed due to front formation, they are confined to a particular season.

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:

Extratropical cyclones are also called wave cyclone or mid- latitude cyclone or temperate cyclones. The systems developing in the mid and high latitude, beyond the tropics are called the middle latitude or extra tropical cyclones.

Characteristics of Temperate Cyclones

- **Location:** Temperate Cyclones are usually formed between 35-65 in both the hemispheres where the cold polar mass from the poles and warm tropical air mass collides with each other. Generally, these cyclones are pronounced more in the northern hemisphere because of higher temperature contrast.
- **Velocity:** As the pressure gradient of these cyclones are comparatively less, the velocity of such cyclones is moderate and ranges from 30 to 40 kmph.
- **Frequency:** As we know, these cyclones are formed due to the convergence of air masses, and polar fronts are responsible for the same, there is no such confined season for these cyclones. These cyclones occur throughout the year, but the frequency is much more in winters as compared to what it is during summer.
- **Air Pressure:** As the isobars of air are widely spread, the pressure isn't that harsh and is very gentle.
- **Area covered by Temperate Cyclones:** Generally, these cyclones take over a large area and occupy over 1500 kilometres in diameters. And if we consider the vertical area, it can reach up to Tropopause.

- **Formation:** The major phenomena responsible for the formation of these cyclones are the formation of fronts due to variations in contrast of the air. Basically, it's the thermal contrast of the air which causes a low-pressure centre, leading to these cyclones.
- **Direction of Movement:** As we know, these cyclones are developed in medium latitude, where in westerlies are prominent. Thus, the direction of the cyclone is from west to east. Considering the northern hemisphere, temperate cyclones move from southwest to northeast, whereas in the southern hemisphere, these cyclones move from northwest to southeast.

35. Which of the following statements regarding the temperature inversion are correct?

1. Over polar areas, temperature inversion is normal throughout the year.
2. Temperature inversion takes place in hills and mountains due to air drainage
3. Temperature inversion over an area indicates stable air

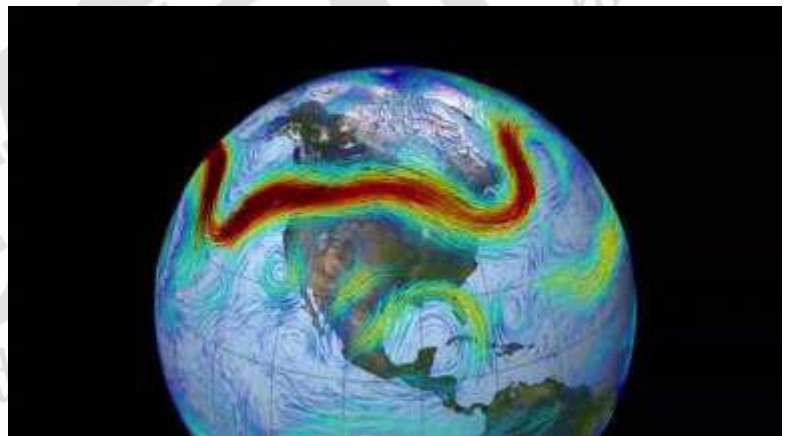
Select the correct answer using the codes given below:

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

Answer: D

Explanation:

- Ideally, with an increase in height, temperature decreases. Under normal situations, in the troposphere, the temperature of the atmosphere decreases with an increase in the altitude at the rate of 1 degree for every 165 meters which are called normal lapse rate.
- However, there are certain conditions when the temperature increases with height instead of decreasing which is contrary to the ideal situation. This contradictory phenomenon is called temperature inversion.
- Inversion is usually of short duration but quite common nonetheless. A long winter night with clear skies and still air is ideal situation for inversion. The heat of the day radiated off during the night, and by early morning hours, the earth is cooler than the air above. Over polar areas, temperature inversion is normal throughout the year
- Surface inversion promotes stability in the lower layers of the atmosphere. Smoke and dust particles get collected beneath the inversion layer and spread horizontally to fill the lower strata of the atmosphere. Dense fogs in mornings are common occurrences especially during winter season. This inversion commonly lasts for few hours until the sun comes up and begins to warm the earth.
- The inversion takes place in hills and mountains due to air drainage. Cold air at the hills and mountains, produced during night, flows under the influence of gravity. Being heavy and dense, the cold air acts almost like water and moves down the slope to pile up deeply in pockets and valley bottoms with warm air above. This is called air drainage. It protects plants from frost damages.



36. Consider the following statements regarding Jet Streams:

1. Jet Streams are formed because of unequal heating of Poles & Equator
2. Jet Streams are generally found in the lower Stratosphere
3. Jet Streams follow the boundaries between hot and cold airmass
4. The apparent movement of the sun has no effect on the location of Jet Stream

Which of the above statements are correct?

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

Answer: A

Explanation:

- Jet streams are relatively narrow bands of geostrophic wind blowing horizontally through the upper layers of the troposphere.
- The main jet streams on Earth flow from west to east (Westerlies) but the flow often shifts to the north and south.
- Jet streams often follow the boundaries between hot and cold air and greater the temperature gradient, faster is the wind inside the jet stream.
- Jet streams often follow the boundaries between hot and cold air and greater the temperature gradient, faster is the wind velocity inside the jet stream.
- Hence jet streams are the strongest during winters in the northern and southern hemisphere.
- Aviators use Jet streams if they are flying in the direction of the flow of the jet streams, and avoid them when flying in opposite direction in order to improve fuel efficiency.
- Jupiter and Saturn are known for having noticeable Jetstream's.
- Jet streams "follow the sun". This means that as the sun's elevation increases each day in the spring, the average latitude of the jet stream shifts poleward. The sun's elevation decreases as autumn approaches and the jet stream's average latitude moves toward the equator. The tropopause is occasionally broken through by the jet stream. The lower stratosphere is next reached.



37. Consider the following factors?

1. Earth's rotation
2. Moon's gravitational pull
3. Local winds
4. Pressure conditions
5. Shape of the shoreline

Which of the above given factors affects the formation of tides?

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

Answer: D

Explanation:

Earth's rotation

- As the Earth spins, different areas of the planet face the moon, and this rotation causes the tides to cycle around the planet.

Moon's gravitational pull

- The gravitational pull of the moon is weaker on the far side of the Earth, inertia wins, the ocean bulges out and high tide occurs.

Local winds

- Local wind and weather patterns also can affect tides. Strong offshore winds can move water away from coastlines, exaggerating low tide exposures. Onshore winds may act to pile up water onto the shoreline, virtually eliminating low tide exposures.

Pressure conditions

- Low pressure will tend to raise sea level and high pressure will tend to depress it. The water level does not, however, adjust itself immediately to a change of pressure, it responds to the average change in pressure over a considerable area.

Shape of the shoreline

- At a smaller scale, the magnitude of tides can be strongly influenced by the shape of the shoreline. When oceanic tidal bulges hit wide continental margins, the height of the tides can be magnified.

38. Which of the following statements regarding local winds of the world is incorrect?

- a) Foehn and Chinook are warm, dry winds
- b) Mistral is cold and dry wind in France
- c) Karaburan is cold violent wind in Bangladesh
- d) Pampero is a cold wind over Argentina

Answer: C

Explanation:

Name	Nature of wind	Place
Chinook (Snow eaters)	Hot, dry wind	The Rockies mountains
Foehn	Hot, dry wind	The Alps
Mistral	Cold wind	The Alps and
Karaburun (black storm)	Hot dusty wind	Central Asia
Pampero	cold wind	Argentina

39. Consider the following pairs:

1. Strait of Dover: Connects North Sea with English Channel
2. Davis Strait: Connects Baffin Bay with Labrador Sea
3. Kerch Strait: Connects Sea of Azov with Black Sea
4. Yucatan Strait: Connects Gulf of Mexico with Caribbean Sea

How many of the above pairs are correctly matched?

- a) One pair only
- b) Two pairs only
- c) Three pairs only
- d) All Four pairs

Answer: D

Explanation:

- **Strait of Dover:** The Strait of Dover at the narrowest part of the English Channel, marking the boundary between the Channel and the North Sea, separating Great Britain from continental Europe.
- **Davis Strait:** Davis Strait is a northern arm of the Atlantic Ocean that lies north of the Labrador Sea. It lies between mid-western Greenland and Baffin Island in Nunavut, Canada. To the north is Baffin Bay.
- **Kerch Strait:** The Kerch Strait is a strait in Eastern Europe. It connects the Black Sea and the Sea of Azov, separating the Kerch Peninsula of Crimea in the west from the Taman Peninsula of Russia's Krasnodar Krai in the east.
- **Yucatan Strait:** The Yucatan Channel separates Cuba from the Yucatan Peninsula of Mexico and links the Caribbean Sea with the Gulf of Mexico.

40. Consider the following statements about Savannah type of climate:

1. It is transitional type of climate found between the equatorial forests and the semiarid and subtropical humid climate.
2. It does not have distinct dry and wet seasons.

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: A

Explanation:

- Savanna is a transitional type of climate found between the equatorial rainforests and hot deserts. Savannas grow in tropical regions 8° to 20° from the Equator. Conditions are warm to hot in all seasons. Mean annual precipitation is generally 80 to 150 cm.
- Savannah climate have distinct dry and wet seasons.

41. Consider the following rivers of Africa:

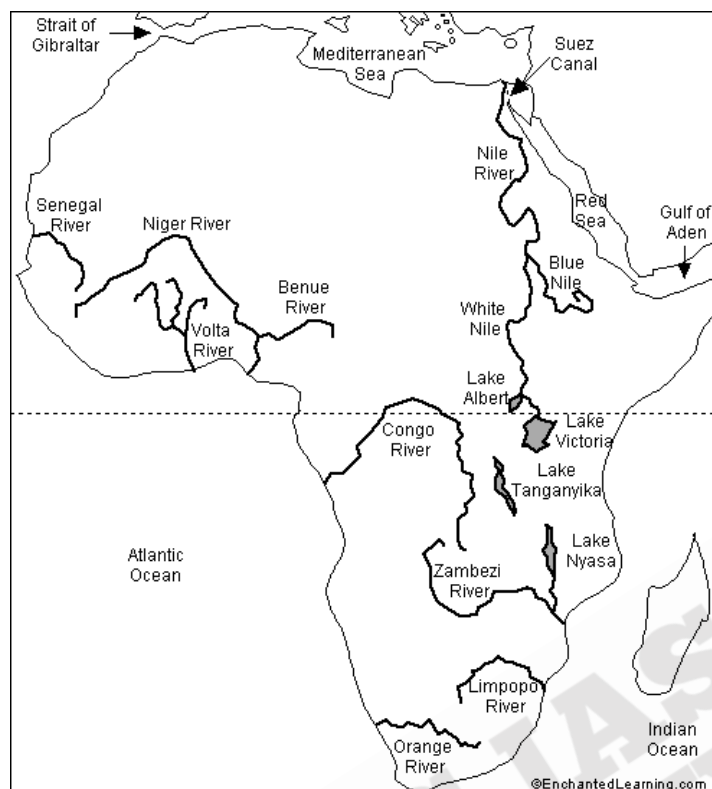
1. River Congo
2. River Zambezi
3. River Orange
4. River Limpopo

Which of the above rivers drain into the Atlantic Ocean?

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

Answer: B

Explanation:



42. Match the following

River	Drains into
A. Yangtze	1. South China Sea
B. Mekong	2. Yellow Sea
C. Huang Ho	3. Andaman Sea
D. Salween	4. East China Sea

Choose the correct answer from the code given below:

- A B C D
- a) 2, 1, 4, 3
- b) 4, 3, 1, 2
- c) 3, 4, 2, 1
- d) 4, 1, 2, 3

Answer: D

Explanation:

- River Yangtze From its source on the Plateau of Tibet to its mouth on the East China Sea, the river traverses or serves as the border between 10 provinces or regions.
- The Mekong drains into the South China Sea through the Mekong Delta in Vietnam.
- T is the 12th longest river in the world and the 7th longest in Asia. Flowing through six countries Downstream from the Golden Triangle, the river flows for a further 2,600 km (1,600 mi) through Laos, Thailand, and Cambodia before entering the South China Sea via a complex delta system in Vietnam.
- The main river of northern China, the Huang He (or Hwang Ho) is the second longest river in the country, after the Yangtze. It rises on the Plateau of Tibet and flows generally eastward, emptying into **the Yellow Sea**.
- Salween river Born in the icy Qinghai Mountains of Tibet, the Salween River first passes through China for approximately 1248 km, then northwest Thailand for the next 96 km, before entering Burma's eastern tip and flows the final 1056 km southwards into the Andaman Sea.

43. Which of the following countries are part of "Horn of Africa"

1. Somalia
2. Ethiopia
3. Kenya
4. Eritrea
5. Djibouti

Choose the correct answer from the codes given below:

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

Answer: C

Explanation:

The HOA juts into the Arabian Sea for hundreds of kilometres and is located along the south of the Gulf of Aden. This region is the easternmost projection of Africa.

In ancient and medieval periods, the area was called Bilad al Barbar meaning land of the Berbers. The countries included in the HOA are Somalia, Ethiopia, Eritrea and Djibouti.

HOA covers an approximate area of 2 million square kilometres and is populated by about 115 million people

Horn of Africa: SEED

- Somalia
- Ethiopia
- Eritrea
- Djibouti

Significance of Horn of Africa

- Africa is critical to India's security, especially the Horn of Africa region, because of its proximity with India. The Indian Ocean Region and Africa are central to the foreign policy of India.
- India has traditionally engaged with African nations through its soft power initiatives. In 2008, India organized the first India-Africa Forum Summit with the aim of recasting its ties with the continent.

Other nemonics to remember the African countries:

- MALE(TC) – Morocco, Algeria, Libya, Egypt
- MNC – Mali, Niger, Chad
- GCC – Garbon, Congo, Cameroon
- ANB – Angola, Namibia, Botswana
- BRU – Burundi, Rwanda, Uganda



44. Which of the following country(s) border the Mediterranean Sea?

1. Israel
2. Syria
3. Jordan
4. Lebanon

Choose the correct answer from the codes given below:

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

Answer: B

Explanation:

- Bordering Countries of Mediterranean Sea (21 countries): Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, and Turkey.

Trick to Remember

- Asian Part: SILCY (Syria, Israel, Lebanon, Cyprus)
- African Part: TAMEL (Tunisia, Algeria, Morocco, Egypt, Libya)
- European Part: BOSS ki SASTI MOMO in Greece and Franc (Bosnia, Spain, Albania, Slovenia, Turkey, Italy, Montenegro, Monaco, Greece, France, Croatia)
- Countries bordering Syria: TIJIL (Turkey, Israel, Jordan, Iraq, Lebanon)

45. Which countries are referred to as Baltic States:

1. Norway, Sweden and Finland
2. Estonia, Latvia and Lithuania
3. Denmark

Choose the correct answer from the codes given below:

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

Answer: B

Explanation:

- The Baltic States, also known as the Baltic countries, is a geopolitical term that usually refers to the three sovereign states on the eastern coast of the Baltic Sea, Estonia, Latvia, and Lithuania.
- These three countries on the border of the European Union with Russia gained their independence first from the Russian Empire at the end of World War I in 1918 and later from the Soviet Union in the early 1990s.
- The Baltic States have been members of the EU since 2004 and recently became part of the eurozone (2011 and 2015).



46. Which of the following ocean currents contribute in aggravating the Great Pacific Garbage Patch?

1. California Current
2. North Equatorial Current
3. Kuroshio Current
4. Oyashio Current
5. Alaska Current

Select the correct answer using the code given below:

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

Answer: A

Explanation:

- **Great Pacific Garbage Patch** - The Great Pacific garbage patch also described as the Pacific trash vortex is a gyre of marine debris particles in the central North Pacific Ocean.

Causes:

- Urban & storm runoff.
- Sewer overflows.
- Beach visitors.
- Inadequate waste
- Disposal & management.
- Industrial activities.
- Construction.
- Illegal dumping.

Countries that are causing most garbage patch -

- Japan tops the list, accounting for 33.6% of the waste identified.
- Next comes CHINA (33.3%) and followed by South Korea (9%)



47. Which of the following are the depositional coastal landforms:

1. Tombolo
2. Beaches
3. Cliffs
4. Spits
5. Caves

Which of the statements given above is/are correct?

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

Answer: A

Explanation

Depositional Landforms: When water loses its energy, any sediment it is carrying is deposited. The build-up of deposited sediment can form different features along the coast

Beaches:

- Depositional landforms made of sand and grains of unconsolidated sediments found along the coast. Sources of beach material include rivers, longshore drift, constructive wave and cliff erosion.
- Sandy beaches often form in sheltered areas like Bays where water is shallow and waves lose their energy. Pebble beaches are formed when cliffs are being eroded and waves have high energy

Bars & Lagoons:

- Sometimes a spit can grow across a bay and join two headlands together connecting with a Sand Bar.
- They can trap shallow lakes behind the bar, these are known as lagoons

Tombolo:

- A connecting sand bar that joins two landmasses is known as Tombolo.
- It forms because the island or sea stack refracts the waves, causing a zone of slow moving water behind the island and deposition begins.

Dunes & Long Shore Bars:

- Due to force of on-shore winds, large amount of coastal sand is driven landwards forming extensive marine dunes.
- Currents and tides deposit rock debris and sand along the coast on sea bed at a distance from the shoreline, such deposition is called Long Shore Bars / Off Shore Bars.

48. Fluvial Erosional Landforms are landforms created by the 'erosional activity of rivers' in this context, consider the following:

1. Hydration
2. Corrosion
3. Attrition
4. Abrasion

Which of the given above are the actions needed to form the fluvial erosional landforms?

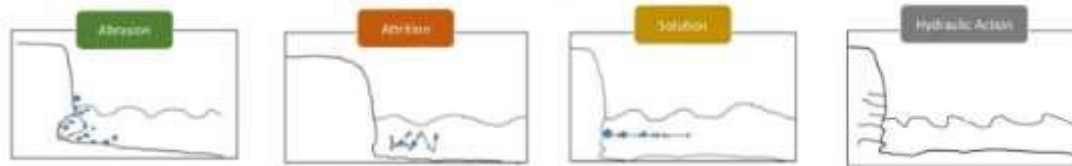
- a) 1, 2 and 3 only
- b) 1, 3 and 4 only
- c) 2 and 4 only
- d) 1, 2, 3 and 4

Answer: D

Explanation

Erosional Processes:

- **Hydraulic Action:** Air trapped in joints and cracks on cliff face is compressed by the force of breaking waves, it weakens the cliff.
- **Abrasion:** The bits of rock and sand in waves grind down cliff surfaces like sand paper.
- **Attrition:** Waves cause rocks and pebbles on the shore to smash into each other, and they break and become smoother.
- **Solution:** Acids contained in sea water dissolve some types of rocks, such as chalk, and limestone. Initiates chemical reaction and finally disintegration, erosion.



49. Consider the following landforms:

1. Valleys
2. Plunge Pools
3. Alluvial Fans
4. Deltas

Which of the landforms given above are considered as Erosional Landforms developed by Running Water?

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

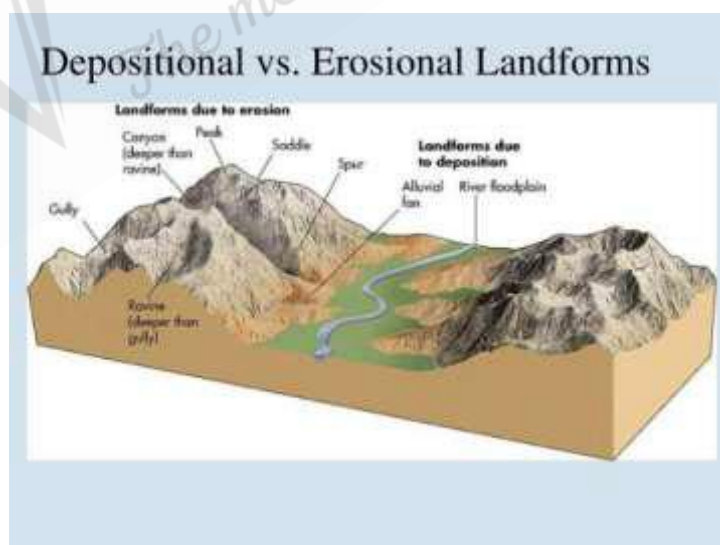
Answer: A

Explanation

Fluvial landforms: These are created by the RUNNING WATER.

Erosional Landforms developed by Running Water. They are:

- **Valleys:** Valleys start as small and narrow rills and the rills will gradually develop into long and wide gullies; the gullies will further deepen, widen and lengthen to give rise to valleys.
Types - Gorge, canyon.
- **Potholes:** Potholes are more or less circular depressions formed because of stream erosion aided by the abrasion of rock fragments.
- **Plunge Pools:** large potholes, quite deep and wide, formed because of the sheer impact of water and rotation of boulders.
- **Incised or Entrenched Meanders:** Incised or Entrenched Meanders are very deep and wide meanders that can be found cut in hard rocks.
- **River Terraces:** River terraces are surfaces marking old valley floor or floodplain levels.



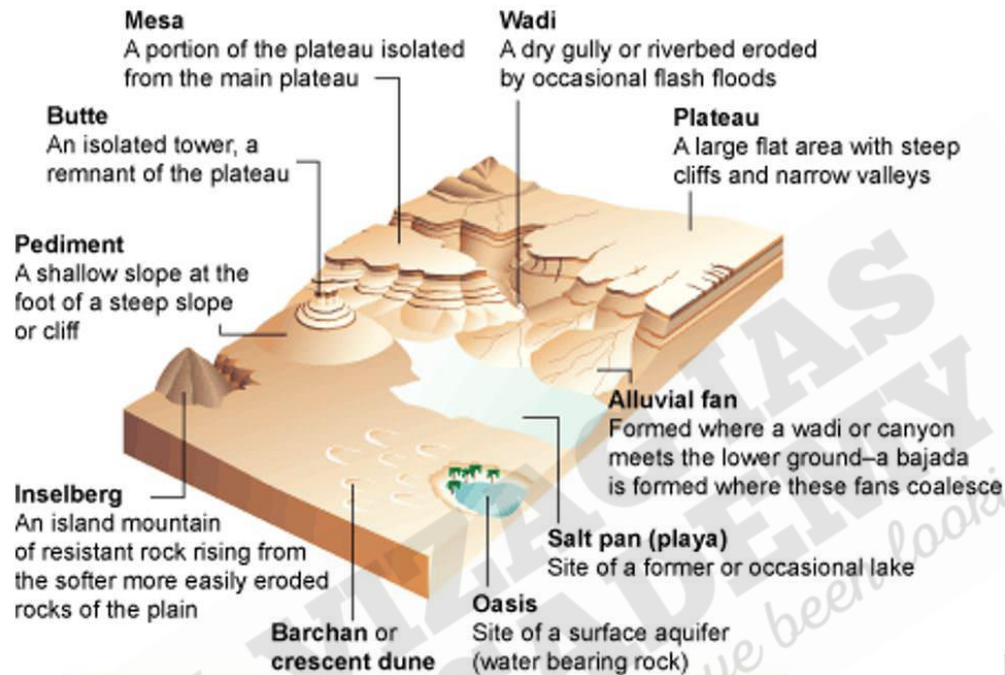
Fluvial Erosional Landforms:	Fluvial Depositional Landforms:
• Gorges	• Floodplains
• canyons	• oxbow lakes,
• waterfalls	• natural levees
• river capture and rapids	• Delta

50. Padi plains and Pediments are erosional landforms are formed due to which of the following geomorphic agents?

- Waves and Currents
- Glacier
- Wind
- Groundwater

Answer: C

Explanation:



51. Which of the following are the limitations of using GDP as a measure of welfare?

- The increase in the level of GDP may not increase the welfare level in the society.
- It focuses more on the total estimate of income distribution of individuals in an economy.
- It undervalues all the non-monetary transactions within an economy.
- It does not take into consideration the impact of negative and positive externalities in an economy.

Select the correct answer using the code given below.

- 1 only
- 2, 3 and 4 only
- 1, 2 and 4 only
- 1, 3 and 4 only

Answer: D

Explanation:

- Welfare is affected by both economic and non-economic factors.
 - Economics factors includes, National income, consumptions
 - Non-Economic factors includes, Environmental pollution, law and order situation
- Gross Domestic Product (GDP) is essentially an indicator of aggregate economic activity. In addition to that, it is also frequently used to describe social welfare. The idea behind this is that GDP tends to correlate with consumption, which in turn is commonly used as a proxy for welfare. In other words, the more people consume.

limitations of using GDP as an index of welfare of a country:

- With every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise.
- The composition of GDP may not be welfare-oriented even when the level of GDP tends to rise.
- Because of non-monetary transactions GDP remains under estimated, and is therefore not a proper index of welfare.
- Impact of externalities (positive or negative impact of activity) is not accounted in the index of social welfare in terms of GDP.

52. With reference to Priority sector lending (PSL), consider the following statements:

1. Loans under PSL can be given to Renewable Energy projects.
2. Provisions of PSL lending are not applicable to Small Finance Bank (SFB).
3. Regional Rural Banks needs to provide 75% of ANBC as PSL

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

Statement 1 is correct:

- The categories under priority sector are as Agriculture, Micro, Small and Medium Enterprises, Export Credit, Education, Housing, Social Infrastructure and Renewable Energy.

Statement 2 is incorrect:

- The provisions of Priority sector lending apply to every Commercial Bank including Regional Rural Bank (RRB), Small Finance Bank (SFB), Local Area Bank and Primary (Urban) Cooperative Bank (UCB) other than Salary Earners' Bank licensed to operate in India by the Reserve Bank of India.

Statement 3 is correct:

- RRB has to provide 75 per cent of ANBC or CEOBE whichever is higher; However, lending to Medium Enterprises, Social Infrastructure and Renewable Energy shall be reckoned for priority sector achievement only up to 15 per cent of ANBC.

53. With reference to the factors determining the price elasticity of demand for a good, consider the following statements:

1. Low-priced products often are highly elastic.
2. Goods with many alternatives or competitors are elastic.

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

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

Answer: B

Explanation:

- Demand elasticity measures how sensitive demand for a good or service is to changes in other variables. There are, in fact, many factors that are important in determining the demand elasticity for

a good or service, such as the price level, the type of good or service, the availability of a substitute, and levels of consumer incomes.

Statement 1 is incorrect:

- High-priced products often are highly elastic because, if prices fall, consumers are likely to buy at a lower price.

Statement 2 is correct:

- Goods with many alternatives or competitors are elastic because, as the price of the good rises, consumers shift purchases to substitute items.
- **Knowledge Base:** Additional Information
- Compared to essential goods, luxury items are highly elastic.
- Incomes and elasticity are related—as consumer incomes increase, demand for products increases as well.

54. Which of the following are known as 'Non debt creating capital receipts in an annual budget?

1. Recoveries of loans
2. Disinvestment proceeds
3. Loans received from foreign governments

Select the correct answer using the code given below:

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

Answer: A

Explanation:

Option 1 and 2 are correct:

- Capital receipts consist of capital receipts and non-debt capital receipts. Non-debt capital receipts, also known as NDCR, account for just 3% of the central government's total receipts.
- Non debt capital receipts (NDCR) of the union government include:
- Recoveries of loans and advances given to state governments, Union territories and foreign governments
- Disinvestment proceeds
- Money accrued to the Union government from listing of central government companies and issue of bonus shares.

Option 3 is incorrect:

- Net borrowing by government at home, loans received from foreign governments, borrowing from RBI are examples of debt creating capital receipts.

55. Which of the following actions can be taken in balance of payment (BoP) crisis by India to stabilize the economy?

1. Artificially stabilization of rupee by the RBI
2. Issue of masala bonds by the government of India
3. Raising of interest rate in the economy

Select the correct answer using the code given below:

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

Answer: D

Explanation:

Statement 1 is correct:

- When there is a balance of payment crisis in the economy then RBI can intervene in the market to “artificially stabilize” the rupee at a specific level. As per the “New Monetary Framework” (NMF), the RBI has the mandate to control the BoP crisis through price stability or inflation targeting.

Statement 2 is correct:

- Masala bonds are bonds issued by an organization outside India but denominated in Indian rupees, rather than the local foreign currency. When these bonds are issued then it boosts the “confidence” of the investors in Indian economy. The issuance of masala bonds helps in favourable balance of payment.

Statement 3 is correct:

- Raising of interest rates in the economy will help in savings of the government and result in favourable balance of payments. The higher interest rates mean higher borrowing costs, resulting in decrease in demand and eventually less spending by the people. The demand for goods and services will then drop, which reduces imports.

56. Which of the following constitutes part of revenue receipts?

1. Dividends and Profits
2. Currency, Coinage, Mint
3. Internal Borrowings
4. Funded Securities
5. Union Excise Duties

Select the correct answer using the codes given below:

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

Answer: A

Explanation:

Revenue receipts are those receipts which need not to be paid again to the payee by the government and income from government assets. These are necessarily one way transaction i.e., there is no need to return the receipts and it is a onetime settlement.

Option 1 is correct:

- Dividends from public sector enterprises and other investments, dividend/surplus of Reserve Bank of India, nationalized Banks and financial institutions are accounted as dividend and profits. It is a part of revenue receipt.

Option 2 is correct:

- Revenue from currency, coinage and mint, which is profit from circulation of coins, is accounted under fiscal services head which is part of revenue receipt. The Government of India has the sole right to mint coins. The responsibility for coinage vests with the Government of India in terms of the Coinage Act, 2011 as amended from time to time. The designing and minting of coins in various denominations is also the responsibility of the Government of India.

Option 3 is incorrect:

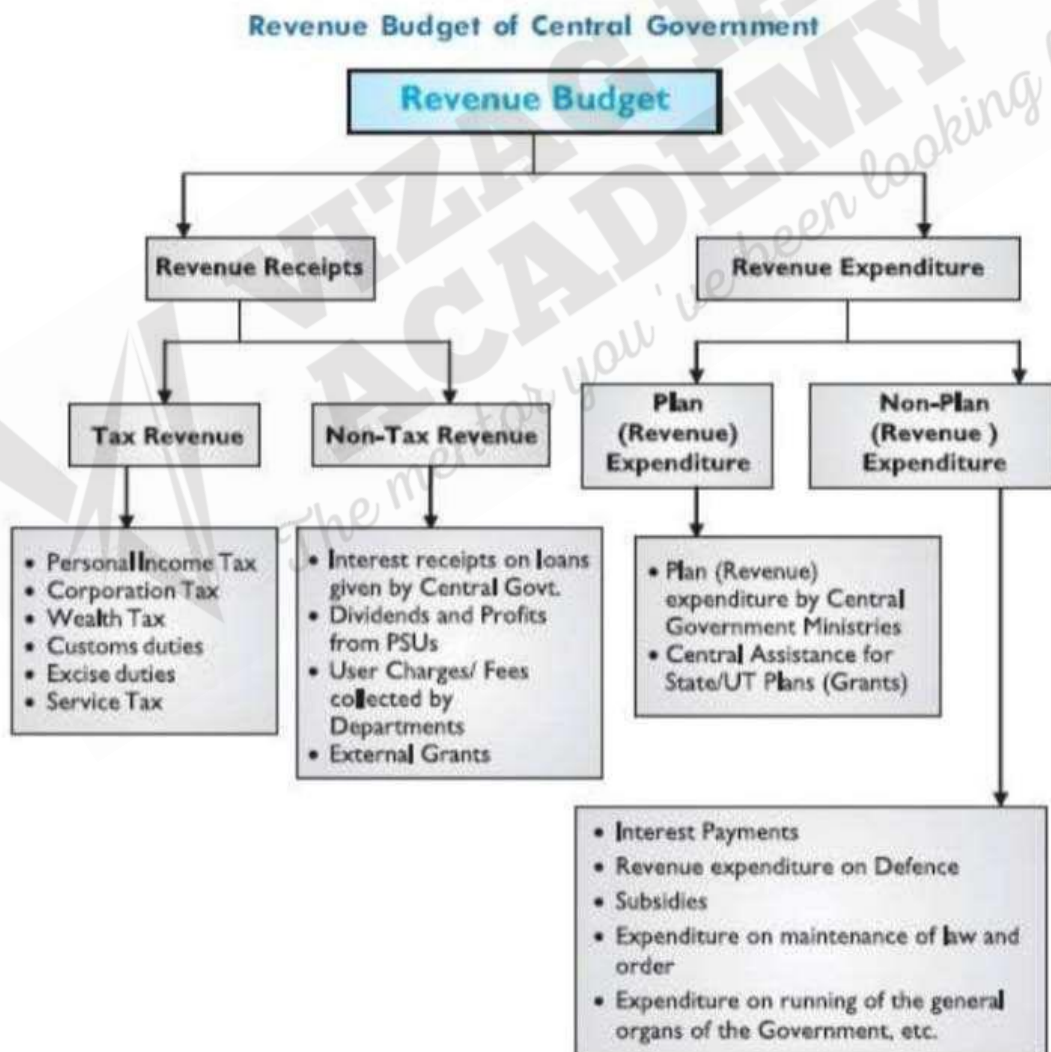
- Internal Borrowings is part of capital receipt and not of revenue receipt. Money borrowed within the country from various sources and various instruments is called internal borrowing. Market Loans are the Government of India's borrowing through dated government securities is called Market Loan. Dated government securities are long term (more than one year) debt instruments. Generally, the tenor of dated securities ranges from 5 years to 40 years.

Option 4 is incorrect:

- Funded Securities is a part of capital receipt and not revenue receipt. Sometimes short-term treasury bills are converted as market loans (long term loans) to defer the repayment. These are called as funded securities. These were made as non-marketable. Sometimes, portion of these securities was made marketable. Non-marketable means it cannot be sold to any third party.

Option 5 is correct:

- The revenue generated by levy and collection of taxes by the Central Government is called tax revenue.
- Union Excise Duties is a part of revenue receipt.
- Duties of excise on the following goods manufactured or produced in India
 - petroleum crude
 - high speed diesel;
 - motor spirit (commonly known as petrol);
 - natural gas;
 - aviation turbine fuel; and
 - tobacco and tobacco products



57. Consider the following statements with reference to the various deficits of the government:

1. The revenue deficit represents that the government's own earnings are not sufficient to meet the day-to-day operations.
2. Fiscal deficit is the difference between the government's total expenditure and its total receipts including borrowings.
3. Primary Deficit is the difference between the current year's fiscal deficit and the interest paid on the borrowings of the previous year.

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

Statement 1 is correct:

- Revenue deficit arises when the government's revenue expenditure exceeds the total revenue receipts. Revenue deficit includes those transactions that have a direct impact on a government's current income and expenditure. This represents that the government's own earnings are not sufficient to meet the day to-day operations of its departments. Revenue deficit turns into borrowings when the government spends more than what it earns and has to resort to the external borrowings.
 $\text{Revenue deficit} = \text{Revenue expenditure} - \text{Revenue receipts}$

Statement 2 is incorrect:

- Fiscal Deficit is the difference between the total income of the government (total taxes and non-debt capital receipts) and its total expenditure. A fiscal deficit situation occurs when the government's expenditure exceeds its income. This difference is calculated both in absolute terms and also as a percentage of the Gross Domestic Product (GDP) of the country. A recurring high fiscal deficit means that the government has been spending beyond its means.
- Fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowing
- $\text{Gross fiscal deficit} = \text{Total expenditure} - (\text{Revenue receipts} + \text{Non debt creating capital receipts})$

Statement 3 is correct:

- Primary Deficit indicates the borrowing requirements of the government, excluding interest. It is the by which the total expenditure of a government exceeds the total income. Note that primary deficit does not include the interest payments made. Also, primary deficit shows the borrowing requirements needed for meeting the expenditure of the government.
 - Primary Deficit is the difference between the current year's fiscal deficit (total income – total expenditure of the government) and the interest paid on the borrowings of the previous year.
 - $\text{Gross primary deficit} = \text{Gross fiscal deficit} - \text{Net interest liabilities}$
 - Net interest liabilities consist of interest payments minus interest receipts by the government on net domestic lending.

58. Consider the following statements:

1. Purchasing Power Parity (PPP) exchange rates are calculated by comparing the prices of the same basket of goods and services in different countries
2. In terms of PPP dollars, India is the fourth largest economy in the world.

Which of the statement given above is/are correct?

- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: A

Explanation:

Statement 1 is correct:

- Purchasing Power Parity (PPP) is the rate at which the currency of one country would have to be converted into that of another country to buy the same amount of goods and services in each country.

Statement 2 is incorrect:

- In PPP term, India is presently the third largest economy in the world. China is the largest economy in PPP terms.

59. In the context of 'Balance of Payments', which of the following components form part of the 'Current Account'?

1. Services
2. Foreign portfolio investments
3. Income from financial investments
4. Current Transfers

Select the correct answer using the code given below:

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

Answer: B

Explanation:

- The balance of payments (BOP) is the place where countries record their monetary transactions with the rest of the world. Examining the current account balance (CAB) of a country's BOP can provide a good idea of its economic activity. It includes activity around a country's industries, capital market, services, and the money entering the country from other governments or through remittances. The components of the Current Account are –
 - Goods are movable and physical in nature. Movable goods include general merchandise, goods used for processing other goods, and non-monetary gold.
 - **Services** transactions result from an intangible action, such as transportation, business services, tourism, royalties, or licensing. If money is being paid for a service, it is recorded as an import (a debit).
 - **Income** is the money going in (credit) or out (debit) of a country from salaries, portfolio investments (in the form of dividends, for example), direct investments, or any other type of investment.
 - Current Transfers are unilateral transfers with nothing received in return. These include workers' remittances, donations, aids and grants, official assistance, and pensions. Due to their nature, current transfers are not considered real resources that affect economic production.
 - **Foreign investment** and loans are included in the capital account. Foreign investment involves capital flows from one country to another, granting the foreign investors extensive ownership stakes in domestic companies and assets.

60. Consider the following statements:

1. The weightage of food in Consumer Price Index (CPI) is higher than that in Wholesale Price Index (WPI).
2. The WPI does not capture changes in the prices of services, which CPI does.
3. Reserve Bank of India has now adopted WPI as its key measure of inflation and to decide on changing the key policy rates.

Which of the statements given above is/are correct?

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

Answer: A

Explanation:

- Wholesale Price Index is a measure of the average change in the prices of goods in the wholesale market or at the wholesale level. Consumer Price index is the measure of changes in the price level of the basket of consumer goods and services bought by the household.

Statement 1 is correct:

- The weightage of food in Consumer Price Index (CPI) is higher than that in Wholesale Price Index (WPI).
- The weightage of food in CPI is around 46% in CPI and around 24% in case of WPI.

Statement 2 is correct:

- The WPI does not capture changes in the prices of services, which CPI does.

Statement 3 is incorrect:

- Based on the suggestions of the Urjit Patel committee, in 2014, RBI abandoned WPI and adopted CPI as the key measure of inflation to decide on changing key policy rates.

61. With reference to the fiscal management in India, consider the following statements:

1. The Central government aims to limit the, fiscal deficit to 4.5% of GDP by 2025-26.
2. The annual fiscal deficit target can be exceeded by up to 2% under the escape clause of the Fiscal Responsibility and Budget Management Act.

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: A

Explanation:

Statement 1 is correct:

- The government aims to steadily reduce fiscal deficit to 4.5% of GDP by 2025-26. Recently, the government has redrawn its fiscal consolidation roadmap. The government has projected a fiscal deficit of 6.8 per cent of Gross Domestic Product (GDP) for financial year 2021-22. It set a glide path to reduce it to 4.5 per cent by financial year 2025-26.

Statement 2 is incorrect:

- The 'Escape clause' under the act allows the Centre to breach its fiscal deficit target by 0.5 percentage points in exceptional circumstances.
- These exceptional circumstances include:
 - National security
 - war

- National calamity
- Collapse of agriculture
- Structural reforms and
- Decline in real output growth of a quarter by at least three percentage points below the average of the previous four quarters. Escape Clause is mentioned under Section 4(2) of the FRBM Act.

62. In the context of international trade, which one of the following conditions make a product eligible for 'Countervailing duty'?

1. when the product has potential of harming the environment of destination country.
2. when the product has not followed the international sanitary rules while production process.
3. when the product has received unfair advantage through export subsidy in the source country.

Select the correct answer using the code given below:

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

Answer: C

Explanation:

- Countervailing duties or CVDs are tariffs on imported goods that are imposed to offset subsidies given by the exporting country's government. CVDs help offset any negative domestic impacts that producers of the same good might experience due to foreign competition, who in this case, would receive a subsidy to export the same good. If left unchecked, such subsidized imports can have a severe effect on the domestic industry, forcing factory closures and causing huge job losses.
- As export subsidies are considered to be an unfair trade practice, the World Trade Organization (WTO)—which deals with the global rules of trade between nations—has detailed procedures in place to establish the circumstances under which countervailing duties can be imposed by an importing nation.

63. Consider the following:

1. Foreign currency convertible bonds.
2. Foreign institutional investment with certain conditions.
3. Global depository receipts.
4. Non-resident external deposits.

Which of the above can be included in Foreign Direct Investments?

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

Answer: A

Explanation:

Statements 1, 2 and 3 are correct:

- 'Foreign Currency Convertible Bond' (FCCB) is a bond issued under the Issue of Foreign Currency Convertible Bonds and Ordinary Shares (Through Depository Receipt Mechanism) Scheme, 1993, as amended from time to time.
- Automatic Route for Issue of Foreign Currency Convertible Bonds (FCCBs) is allowed. Foreign Portfolio Investment is any investment made by a person resident outside India in capital instruments where such investment is
 - less than 10 percent of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company or

- less than 10 percent of the paid up value of each series of capital instruments of a listed Indian company.
- It is the percentage which defines whether it is direct or institutional investment. FII made above 10 percent of the post issue paid-up equity capital will be considered as FDI. But Once an FDI always an FDI.
- Foreign investment in Indian securities has been made possible through the purchase of Global Depository Receipts, Foreign Currency Convertible Bonds and Foreign Currency Bonds issued by Indian issuers which are listed, traded and settled overseas.

Statement 4 is incorrect:

- A Non-Resident External (NRE) account is a rupee dominated account opened by an NRI to facilitate deposit of foreign currency earnings. It is not an FDI.

64. In the context of the economy, the concept of inclusive growth inculcates which of the following?

1. Industrial development
2. Agriculture development
3. Equal distribution of income
4. Environment protection
5. Reduction in regional disparities

Select the correct answer using the codes given below:

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

Answer: D

Explanation:

- As per OECD, Inclusive growth is economic growth that is distributed fairly across society and creates opportunities for all. The United Nations Development Program (UNDP) defines inclusive growth as "the process and result of all groups of people participating in the organisation of growth and benefiting equally from it." This indicates that inclusive growth should include all segments as both beneficiaries and collaborators in growth and that the excluded should be included in the process.

65. Consider the following statements with respect to the public debt in India:

1. India's public debt has consistently been rising in the last five years.
2. Non-resident deposits comprises the largest component of external debt.
3. The public debt to GDP ratio is a measure of government debt sustainability.

Which of the statements given above is/are correct?

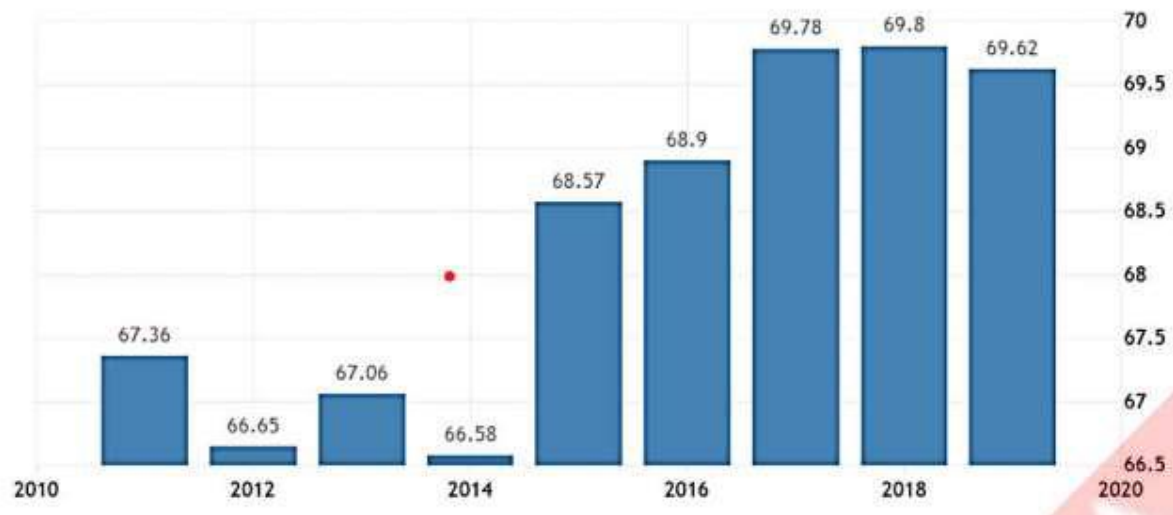
- a) 1 and 2 only
- b) 3 only
- c) 2 and 3 only
- d) 1 and 3 only

Answer: B

Explanation:

Statement 1 and 2 is incorrect:

- India recorded a government debt equivalent to 69.62 percent of the country's Gross Domestic Product in the 2019-20 fiscal year. However, it has not been consistently rising in the last five years. It fell by a small percentage in 2019 as compared to 2018.



66. Consider the following pairs with respect to different kinds of economic recovery:

Shape of Economic	Recovery Implication
1. K-shape	One sector of the economy trends upwards while other sector sinks
2. V-shape	Economy declines and then spends a significant period of time at the trough before improving.
3. W-shape	Double-dip recession

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

- 1 and 2 only
- 3 only
- 2 and 3 only
- 1 and 3 only

Answer: D

Explanation:

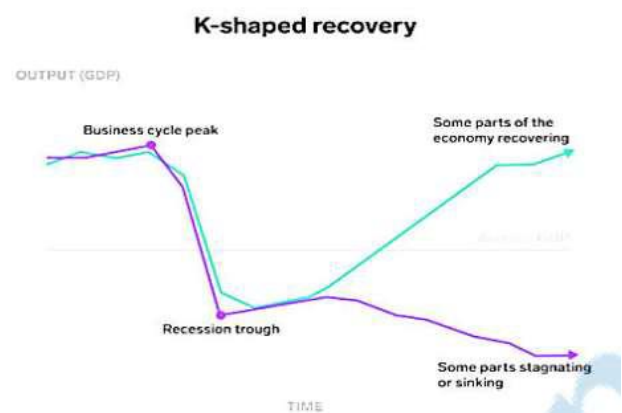
Pair 1 is correctly matched:

- The K-shaped recovery occurs when one segment of the economy trends upward - experiencing more of V-shaped or U-shaped recovery - while another segment either sinks further or recovers much more slowly, like with the L-shaped recovery. This divergence between two different economic groups is depicted by the two diagonal lines in the letter K.

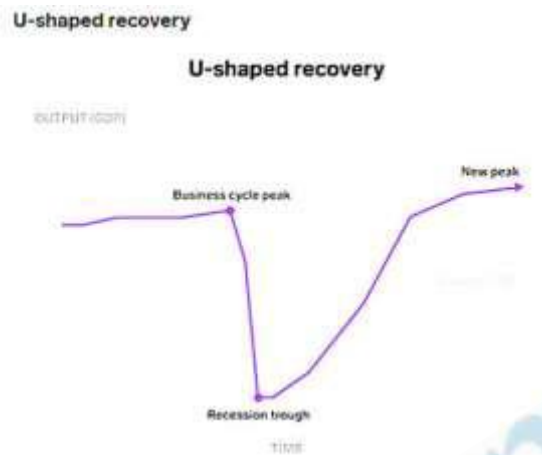
Pair 2 is incorrectly matched:

- In a V-shaped recovery, the economy experiences a sharp decline but then bounces back almost immediately to its pre-recession level. This can occur when the economic interruption that caused a recession doesn't last long. It could be a seasonal slowdown when consumers are temporarily out of work but employers are holding those jobs for them. Or could be that swift and appropriate monetary and fiscal policies successfully mitigate the impact of the recession.

K-shaped recovery

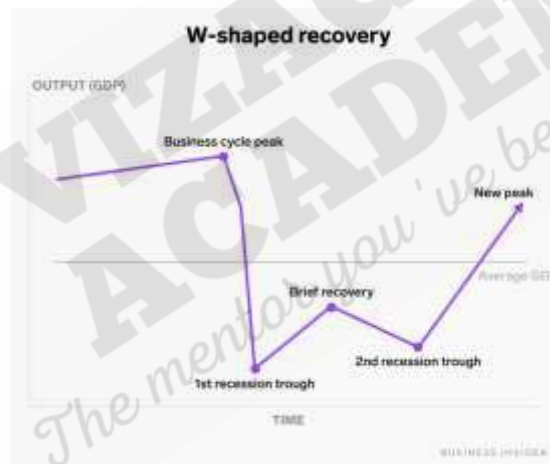


- The U-shaped recovery is one in which the economy declines and then spends a significant period of time at the trough before improving. This doesn't necessarily mean that the recession is more severe in terms of the loss in GDP, but it does mean that it lasts longer. The 1973- 1975 recession, in which the economy didn't resume pre-recession levels until 1976, is a clear example of a U-shaped recovery.



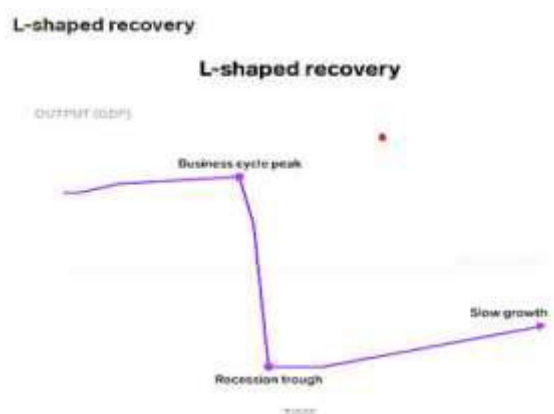
Pair 3 is correctly matched:

- A W-shaped recovery, also known as a double-dip recession, is one in which there's a brief economic comeback - sometimes tricking people into thinking they'll get a V-shaped recovery - but then the economy falls a second time. It's essentially two recessions in one, which prolongs the impact of the first and can shatter consumer confidence.



Knowledge Base:

- The L-shaped recovery has the lengthiest recession period of all - so long, in fact, it's sometimes dubbed a depression. After a sharp decline, GDP begins to increase, but recovery is very gradual and lengthy. It can take years for the economy to get back to where it was pre-downturn, and in some cases, this slow revival drags on indefinitely.



67. Which of the following are the possible impacts of higher 'Tax Expenditure' on Indian economy?

1. More complex tax system
2. Promotion of Crony capitalism
3. Decline in Revenue Receipts

Select the correct answer using the code given below.

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

Answer: D

Explanation

- **Tax Expenditure** does not refer to the government's expenditures associated with tax collecting. Rather, it refers to the opportunity cost of taxing at reduced rates, or the expense of offering tax payers' exemptions, deductions, rebates, deferrals credits, and so on. Tax expenditures show how much more money the government could have received if such policies had not been implemented. In other words, it can be understood as revenue foregone.

Impact of Tax Expenditure

- Revenue forgone by the government through the provisions of tax laws that allow deductions exclusions, or exemptions from the tax payers taxable expenditure result in tax expenditure.
- According to an estimate, the foregone revenue could amount to almost 6.5 per cent of GDP.
- This can also be exploited by vested interests as a means of crony capitalism and excess favours done to corporations tax system become more complex than the previous.

68. With regard to the surplus income of RBI, which of the following statements is/are correct?

1. RBI is exempted from paying income tax on its surplus income but has to pay wealth tax.
2. The amount of transfer of surplus to the Centre is decided by the central bank after consultations with the government.
3. Surplus transfer to the Government forms part of its capital receipts.
4. Banking Regulations Act of 1949 provides for the transfer of surplus income by the RBI to the Centre.

Select the correct answer using the code given below:

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

Answer: D

Explanation:

- The Reserve Bank of India (RBI) transfers its surplus profits to the Government every year. Surplus profit is the profit left after making various contingency provisions for bad and doubtful debts, depreciation in assets, contributions to staff, and superannuation funds, etc.

Statement 1 is *incorrect*:

- RBI is exempted from paying income tax or any other tax, including wealth tax. Section 48 (Exemption of Bank from income-tax and super-tax) of the RBI Act, 1934 provides that the Bank shall not be liable to pay income-tax or super-tax on any of its income, profits or gains.

Statement 2 is *correct*:

- The amount of transfer of surplus to the Centre is decided by the central bank after consultations with the government. The decision to transfer the surplus is taken at the meeting of the Central Board of Directors of RBI.

Statement 3 is incorrect:

- Surplus transfer is put under the head 'non-tax revenue' in the revenue budget as it is dividend. It helps the government narrow its deficit or borrowings.

Statement 4 is incorrect:

- It is not the Banking regulations act 1949, but the section 47 of RBI Act 1935 which provides for the surplus transfer income of RBI to the Centre.

Knowledge Base:

Source of RBI's income –

- Returns it earns on its foreign currency assets which could be in the form of bonds and treasury bills of other central banks or top-rated securities, and deposits with other central banks.
- Interest on its holdings of local rupee-denominated government bonds or securities, and while lending to banks for very short tenures, such as overnight.
- Management commission on handling the borrowings of state governments and the central government.

Expenditure of RBI

- Expenses on the printing of currency notes
- Expenses on staff
- The commission it gives to banks for undertaking transactions on behalf of the government across the country, and to primary dealers, including banks, for underwriting some of these borrowings.

69. Which of the following are the intended benefits of strategic disinvestment?

1. Meeting budgetary requirements.
2. To improve public finances and overall economic efficiency
3. To depoliticise non-essential services
4. Transfer of commercial risks.
5. To raise funds for technological upgradation of PSUs

Select the correct answer using the code given below:

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

Answer: D

Explanation:

- Disinvestment means sale or liquidation of assets by the government, usually in Central and state public sector enterprises, projects, or other fixed assets. The government undertakes disinvestment to reduce the fiscal burden on the exchequer, or to raise money for meeting specific needs, such as to bridge the revenue shortfall from other regular sources. Strategic disinvestment is the transfer of the ownership and control of a public sector entity to some other entity (mostly to a private sector entity). Unlike the simple disinvestment, strategic sale implies a kind of privatization. The disinvestment commission defines strategic sale as the sale of a substantial portion of the Government shareholding of a central public sector enterprises (CPSE) of upto 50%, or such higher percentage as the competent authority may determine, along with transfer of management control.

Main objectives of strategic Disinvestment:

- To meet the budgetary needs.
- To reduce fiscal deficit.
- To improve public finances and overall economic efficiency
- To diversify the ownership of PSU for enhancing efficiency of individual enterprise
- To raise funds for technological upgradation, modernization and expansion of PSUs

- To introduce, competition and market discipline
- To fund growth and development programmes
- To encourage wider share of ownership
- To depoliticise non-essential services
- Transfer of Commercial Risks

70. India has recorded the highest-ever annual FDI inflow of USD 83.57 billion in the Financial Year 2021-22. In this context, consider the following statements:

1. United Kingdom was the top investor country with respect to FDI Equity inflow.
2. Computer Software & Hardware was the top recipient sector of FDI Equity inflow.
3. Maharashtra was the highest recipient state of FDI Equity inflow.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) 2 and 3 only
- d) None

Answer: B

Explanation:

Statement 1 is not correct:

- India has recorded highest ever annual FDI inflow of USD 83.57 billion in the Financial Year 2021-22. In 2014-2015, FDI inflow in India stood at mere 45.15 USD billion as compared to the highest ever annual FDI inflow of USD 83.57 billion reported during the financial year 2021-22 overtaking last year's FDI by USD 1.60 billion despite military operation in Ukraine and COVID-19 pandemic. India's FDI inflows have increased 20-fold since FY03-04, when the inflows were USD 4.3 billion only.
- In terms of top investor countries of FDI Equity inflow, 'Singapore' is at the apex with 27%, followed by U.S.A (18%) and Mauritius (16%) for the FY 2021-22.

Statement 2 is correct:

- 'Computer Software & Hardware' has emerged as the top recipient sector of FDI Equity inflow during FY 2021-22 with around 25% share followed by Services Sector (12%) and Automobile Industry (12%) respectively.

Statement 3 is not correct:

- Under the sector 'Computer Software & Hardware', the major recipient states of FDI Equity inflow are Karnataka (53%), Delhi (17%) and Maharashtra (17%) during FY 2021-22.
- Karnataka is the top recipient state with 38% share of the total FDI Equity inflow reported during the FY 2021-22 followed by Maharashtra (26%) and Delhi (14%). Majority of the equity inflow of Karnataka has been reported in the sectors 'Computer Software & Hardware' (35%), Automobile Industry (20%) and Education' (12%) during the FY 2021-22.

71. Which of the following statements best describes the Reserve Tranche Position of an economy?

- a) It is the total amount of money held by the banks with the Central Bank.
- b) It is the total liability of the monetary authority (Central Bank) of the country.
- c) It is the proportion of money that banks keep with themselves as reserve requirement.
- d) It is the foreign currency amounts that a member country may draw from the IMF without agreeing to conditions.

Answer: D

Explanation:

- A reserve tranche is a portion of the required quota of currency each member country must provide to the International Monetary Fund (IMF) that can be utilized for its own purposes without a service fee or economic reform conditions.
- The IMF is funded through its members and their quota contributions. The reserve tranche is basically an emergency account that IMF members can access at any time without agreeing to conditions or paying a service fee. **Hence option (d) is the correct answer.**
- The reserve tranche represents the member's unconditional drawing right on the IMF, created by the foreign exchange portion of the quota subscription, plus increase (decrease) through the IMF's sale (repurchase) of the member's currency to meet the demand for use of IMF resources by other members in need of balance of payments financing.
- The reserve tranches that countries hold with the IMF are considered their facilities of first resort, meaning they will tap into the reserve tranche at a short notice before seeking a formal credit tranche.
- Initially, member nations' reserve tranches are 25% of their quota, but this position can change according to any lending that the IMF does with its holdings of the member's currency. For any member country, out of the total quota, 25% should be paid in the form of foreign currency or gold. Hence this is called as reserve tranche or gold tranche. The remaining 75% can be in domestic currencies and it is called credit tranche

72. With reference to FDI, consider the following statements:

1. In the Year 2020-21, India received the lowest FDI since the 1991 reforms due to Covid 19.
2. Recently annual FDI inflows in India crossed the 100 Billion mark.

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: D

Explanation:

Statement 1 is not correct:

- FDI in Industries: Measures taken by the Government to put in place an enabling investor-friendly FDI Policy has resulted in increased FDI inflows setting up new records

**APPENDIX TABLE 9: FOREIGN DIRECT INVESTMENT FLOWS TO INDIA:
COUNTRY-WISE AND INDUSTRY-WISE**

(US\$ billion)

Source/Industry	2017-18	2018-19	2019-20	2020-21	2021-22 (P)
1	2	3	4	5	6
Total FDI	44.9	44.4	50.0	59.6	58.8
Country-wise Inflows					
Singapore	12.2	16.2	14.7	17.4	15.9
US	2.1	3.1	4.1	13.8	10.5
Mauritius	15.9	8.1	8.2	5.6	9.4
Netherlands	2.8	3.9	6.5	2.8	4.6
Switzerland	0.5	0.3	0.2	0.2	4.3
Cayman Islands	1.2	1.0	3.7	2.8	3.8
UK	0.8	1.4	1.3	2.0	1.6
Japan	1.6	3.0	3.2	1.9	1.5
UAE	1.0	0.9	0.3	4.2	1.0
Germany	1.1	0.9	0.5	0.7	0.7
Canada	0.3	0.6	0.2	0.0	0.5
Luxembourg	0.3	0.3	0.3	0.3	0.5
Thailand	0.1	0.1	0.0	0.1	0.5
France	0.5	0.4	1.9	1.3	0.3
Denmark	0.0	0.1	0.0	0.1	0.3
Others	4.2	4.2	4.7	6.3	3.1

Statement 2 is not correct:

- As per the latest figures of the government, India has registered its highest-ever total FDI inflows of \$84.84 billion in 2021-22. Inflow of foreign direct investment (FDI) to India is expected to surge to a record \$100 billion in the current fiscal year (2022-23).
- Over the last seven financial years (2014-21), India received an FDI inflow worth US\$ 440.27 billion which is nearly 58 percent of the FDI received by the country in the last 21 years (US\$ 763.83 billion).
- Several initiatives have been taken by the Government since April 2020 to further reform the FDI policy framework to ensure against opportunistic takeovers and acquisitions while also facilitating an increased flow of long-term capital, a global technology, processes, and international best practices to support the growth of these sectors.

73. With reference to the recession in an economy, consider the following statements:

1. Two consecutive quarters of negative economic growth is an indicator of recession.
2. Recession is normally considered to be extremely severe than depression as the decline in GDP can exceed 10 percent.

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: A

Explanation:

Statement 1 is correct:

- According to the World Bank's annual report global economic prospects, the global economy will come "dangerously close" to a recession this year, owing to poorer growth in all of the world's top economies - the United States, Europe, and China.
- There is no official definition of recession, but there is general recognition that the term refers to a period of decline in economic activity. Very short periods of decline are not considered recessions.
- Most commentators and analysts use, as a practical definition of recession, two consecutive quarters of decline in a country's real (inflation-adjusted) gross domestic product (GDP)—the value of all goods and services a country produces. Although this definition is a useful rule of thumb, it has drawbacks. A focus on GDP alone is narrow, and it is often better to consider a wider set of measures of economic activity to determine whether a country is indeed suffering a recession. Using other indicators can also provide a timelier gauge of the state of the economy.

Statement 2 is not correct:

- There is no formal definition of depression, but most analysts consider a depression to be an extremely severe recession, in which the decline in GDP exceeds 10 percent. There have been only a handful of depression episodes in advanced economies since 1960. The most recent was in the early 1990s in Finland, which registered a decline in GDP of about 14 percent

74. Consider the following statements regarding the World Bank:

1. India is a founding member of the World Bank.
2. The Board of Governors is the highest decision-making body at the Bank.
3. To become a member of the World Bank, a country must first join the United Nations.

Which of the statements given above is/are correct?

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

d) 1 and 2 only

Answer: D

Explanation:

Statement 3 is incorrect:

- Founded at the Bretton Woods conference in 1944, the World Bank Group works with developing countries to reduce poverty and increase shared prosperity. The World Bank Group provides financing, policy advice, and technical assistance to governments, and also focuses on strengthening the private sector in developing countries.
- The World Bank is like a cooperative, made up of 189 member countries. Countries must first join the IMF to be eligible to join the World Bank Group; today, each institution has 189 member countries.

Statement 2 is correct:

- It is not necessary that a country must first join the United Nations in order to become a member of the World bank. For instance, Switzerland joined the World Bank Group in 1992 after Swiss voters approved the accession with a 56 percent majority. But Switzerland officially joined the UN only in 2002.
- These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank. Generally, the governors are member countries' ministers of finance or ministers of development. They meet once a year at the Annual Meetings of the Boards of Governors of the World Bank Group and the International Monetary Fund.

Statement 1 is correct:

- The governors delegate specific duties to 25 Executive Directors, who work on-site at the Bank. The five largest shareholders appoint an executive director, while other member countries are represented by elected executive directors.
- The World Bank Group is one of the world's largest sources of funding and knowledge for developing countries. Its five institutions share a commitment to reducing poverty, increasing shared prosperity, and promoting sustainable development.
- India, then still under colonial rule in 1945, became one of the World Bank's founding members. India is a member of four of the five constituents of the World Bank Group viz., the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA). India is not a member of ICSID (International Centre for Settlement of Investment Disputes).

75. Foreign Direct Investment is prohibited under which of the following sectors in India?

1. Trading in Transferable Development Rights
2. Manufacturing of cigarettes
3. Lottery Business
4. Gambling and Betting
5. Air Transport Services

Select the correct answer using the code given below.

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

Answer: C

Explanation:

Sectors where FDI is Banned

- Retail Trading (except single brand product retailing);
- Atomic Energy;

- Lottery Business including Government / private lottery, online lotteries etc;
- Gambling and Betting including casinos etc.;
- Business of chit fund;
- Nidhi Company;
- Trading in Transferable Development Rights (TDRs);
- Activities/sector not opened to private sector investment;
- Agriculture (excluding Floriculture, Horticulture, Development of seeds, Animal Husbandry, Pisciculture and cultivation of vegetables, mushrooms etc. under controlled conditions and services related to Agro and allied sectors) and Plantations (Other than Tea Plantations);
- Real estate business, or construction of farm houses; Manufacturing of Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes.

76. In the context of the Balance of Payment, which of the following items come under the Capital Account?

1. External Commercial Borrowings
2. Bilateral loans
3. Foreign Direct Investment (FDI)
4. Remittances

Select the correct answer using the code given below.

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

Answer: D

Explanation:

There are two main accounts in the Balance of Payments – the current account and the capital account.

Current Account:

- It records exports and imports in goods and services and transfer payments. Trade in services denoted as invisible trade (because they are not seen to cross national borders) includes both factor income (payment for inputs-investment income, that is, the interest, profits and dividends on our assets abroad minus the income foreigners earn on assets they own in India) and non-factor income (shipping, banking, insurance, tourism, software services, etc.).
- Transfer payments are receipts which the residents of a country receive 'for free', without having to make any present or future payments in return. They consist of remittances, gifts and grants. They could be official or private.

Capital Account:

- It includes sales of assets such as money, stocks, bonds, etc. The main components of the capital account include foreign investment, loans and banking capital.
- Foreign investment, comprising Foreign Direct Investment (FDI) and Portfolio Investment consisting of Foreign Institutional Investors (FIIs) investment, American Depository Receipts/Global Depository Receipts (ADRs/GDRs) represents non-debt liabilities.
- Loans (external assistance, external commercial borrowings and trade credit) and banking capital, including non-resident Indian (NRI) deposits are debt liabilities.

77. Consider the following statements regarding the lending facilities of the International Monetary Fund (IMF):

1. Rapid Credit Facility (RCF) provides rapid concessional financial assistance to low-income countries facing an urgent balance of payments need.
2. Rapid Financing Instrument (RFI) provides rapid financial assistance to all member countries facing an urgent balance of payments need.

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: A

Explanation:

International Monetary Fund (IMF):

- The formation of the IMF was initiated in 1944 at the Bretton Woods Conference.
- IMF came into operation on 27th December 1945 and is today an international organization that consists of 190 member countries.
- Headquartered in Washington, D.C., IMF focuses on fostering global monetary cooperation, securing financial stability, and facilitating and promoting international trade, employment, and economic growth around the world.
- The IMF is a specialized agency of the United Nations.

Rapid Financing Instrument (RFI)

- It provides rapid financial assistance, which is available to all member countries facing an urgent balance of payments need. It was created as part of a broader reform to make the IMF's financial support more flexible to address the diverse needs of member countries.
- It replaced the IMF's previous emergency assistance policy and can be used in a wide range of circumstances.

Rapid Credit Facility (RCF):

- It provides rapid concessional financial assistance to low-income countries (LICs) facing an urgent balance of payments (BOP) need with no ex-post conditionality where a full-fledged economic program is neither necessary nor feasible. It was created under the Poverty Reduction and Growth Trust (PRGT) as part of a broader reform to make the Fund's financial support more flexible and better tailored to the diverse needs of LICs, including in times of crisis.

78. In the context of the balance of payment (BOP), which of the following are included in the transfer payments?

1. Aid received in kind from foreign governments
2. Remittances
3. Non-resident deposits
4. Contributions and donations to religious institutions

Select the correct answer using the code given below.

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

Answer: D

Explanation:

- The balance of payment is the statement that files all the transactions between the entities, government anatomies, or individuals of one country to another for a given period of time.
- For a country, the balance of payment specifies whether the country has an excess or shortage of funds. It gives an indication of whether the country's export is more than its import or vice versa.

The balance of payment is divided into three types:

Current account	Capital account	Finance account
• This account scans all the incoming and outgoing of goods and services between countries. All the payments made for raw materials and constructed goods are covered under this account. Few other deliveries that are included in this category are from tourism, engineering, stocks, business services, transportation, and royalties from licenses and copyrights. All these combines together to make a BOP of a country.	• Capital transactions like purchase and sale of assets (non-financial) like lands and properties are monitored under this account. This account also records the flow of taxes, acquisition, and sale of fixed assets by immigrants moving into the different country. The shortage or excess in the current account is governed by the finance from the capital account and vice versa	The funds that flow to and from the other countries through investments like real estate, foreign direct investments, business enterprises, etc., is recorded in this account. This account calculates the foreign proprietor of domestic assets and domestic proprietor of foreign assets, and analyses if it is acquiring or selling more assets like stocks, gold, equity, etc

A transfer payment is a payment of money for which there are no goods or services exchanged.

- Transfer payments commonly refer to efforts by local, state, and federal governments to redistribute money to those in need.
- Corporate bailouts and subsidies are not commonly referred to as transfer payments.

Types of Transfer Payments

- The most well-known form of transfer payment is likely Social Security payments, whether for retirement or disability. These are considered transfer payments even though most recipients have paid into the system during their working lives. Similarly, unemployment payments are also considered transfer payments.
- There are many other types of transfer payments. They can be made from one person to another or even from an individual to an organization. These can include individual donations to charities or non-profit organizations, or even a simple cash gift from one person to another.
- Subsidies for education and training are also considered a type of government transfer payment. This includes transfers to companies or labour groups that provide educational services or operate apprenticeship programs
- Transfer payments do not include subsidies paid to farmers, manufacturers, and exporters, even though they are a one-way payment from the government.

79. With reference to the Wholesale Price Index (WPI) and Consumer Price Index (CPI), consider the following statements:

1. WPI is released by the Office of Economic Adviser while the CPI is released by National Statistics Office.
2. Fuel and Power component has the maximum weightage in the WPI while the Food and Beverages component holds the maximum weightage in the CPI.
3. WPI helps in timely intervention by the Government to check inflation in essential items while CPI is used as an anchor for the inflation targeting in India.

Which of the statements given above are correct?

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

Answer: C

Explanation:

- A price index is a measure of the average level of prices, which means that it does not show the exact price rise or fall of a single good. The rate of inflation is measured on the basis of price indices which are of two kinds— Wholesale Price Index (WPI) and Consumer Price Index (CPI). CPI measures the average change in prices of fixed baskets of goods and services that households purchase for the purpose of consumption. It is also called Retail Inflation. The WPI is average change of prices of a fixed basket of goods at the first point of bulk sale in the domestic market over a given period of time.

Statement 1 is correct:

- WPI is compiled and released on monthly basis by the Office of Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.
- CPI (Urban, Rural and All India) is released by National Statistics Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI). CPI (Industrial Workers), CPI (Agricultural Labour) and CPI (Rural Labour) are a set of Indices released by the Labour Bureau, Ministry of Labour.

Statement 2 is incorrect:

The WPI comprises of three major groups:

- **Primary Articles** (eg- Food Articles, Vegetables, Milk, Minerals etc) has the weightage of 22.62%.
- **Fuel and Power** (eg- LPG, Petrol etc) has the weightage of 13.15%.
- **Manufactured Products** (eg- manufacture of food products, sugar, manufacture of textiles etc) has the weightage of 64.23%.
- The major component in CPI (C) are as follows (along with their weights):
 - Food and Beverages – 45.86
 - Housing – 10.07
 - Fuel and Light – 6.84
 - Clothing and Footwear – 6.53
 - Pan, tobacco and intoxicants – 2.38
 - Miscellaneous – 28.32

Statement 3 is correct:

- WPI provides estimates of inflation at the wholesale transactions level for the economy as a whole.
- This helps in timely intervention by the Government to check inflation, in particular inflation in essential commodities, before the price increase spills over to retail prices. The CPI (C) is used as nominal anchor for conduct of monetary policy in India. Monetary Policy Committee is mandated to keep CPI (C) in range 2% – 6%. So CPI is used for inflation targeting. CPI is also used as deflators in the National Accounts. CPI is also used for calculating Dearness Allowance. Knowledge Base:
- **Some of the important new features of WPI with Base 2011-12 are**
 - The Base Year for WPI was changed from 2004-05 to 2011-12 in May 2017.
 - The number of items in the basket has been increased from 676 to 697.
 - New definition of wholesale price index does not include taxes in order to remove the impact of fiscal policy.
 - The item level indices are being compiled based on statistically robust Geometric mean as compared to Arithmetic mean used in the WPI 2004-05 series.
 - As a part of the revised WPI series, a separate WPI Food Index has been launched. WPI food index measures the changes in prices of food items at the level of producers.

- WPI is used as a deflator for many sectors of the economy for estimating GDP by CSO. Global investors also track WPI as one of the key macro indicators for their investment decisions. Thus, the current Base Year for CPI (R), CPI (U) CPI (C) is 2012.

80. Consider the following Pairs with reference to types of unemployment and their description:

Types of unemployment	Description
1. Frictional Unemployment	When there is a mismatch between the worker's skills and availability of jobs
2. Disguised Unemployment	More people are doing work than actually required
3. Structural Unemployment	People do not have work during certain seasons of the year
4. Cyclical Unemployment	People are unemployed for a short span of time while searching for a new job or switching between jobs.

How many pairs given above are correctly matched?

- Only one pair
- Only two pairs
- Only three pairs
- All four pairs

Answer: A

Explanation:

- Unemployment is a situation when a person actively searches for a job and is unable to find work.
- Unemployment is measured by the unemployment rate, which is the number of people who are unemployed as a percentage of the labour force (the total number of people employed added to those unemployed).

There are several kinds of unemployment in India:

Pair 1 is incorrectly matched:

- Frictional Unemployment** is a situation when people are unemployed for a short span of time while searching for a new job or switching between jobs. Frictional Unemployment also called Search Unemployment, is the time lag between the jobs. Frictional unemployment is considered as voluntary unemployment because the reason for unemployment is not a shortage of jobs, but in fact, the workers themselves quit their jobs in search of better opportunities.

Pair 2 is correctly matched:

- Disguised Unemployment** is a type of unemployment where people employed are more than actually needed. Disguised unemployment is generally traced in unorganised sectors or the agricultural sectors.

Pair 3 is incorrectly matched:

- Structural Unemployment** arises when there is a mismatch between the worker's skills and availability of jobs in the market. Many people in India do not get job matching to their skills or due to lack of required skills they do not get jobs and because of poor education level, it becomes important to provide them related training.
- Seasonal Unemployment** is the situation of unemployment when people do not have work during certain seasons of the year such as labourers in India rarely have occupation throughout the year.

Pair 4 is incorrectly matched:

- Cyclical Unemployment** caused due to the business cycle, where the number of unemployed heads rises during recessions and declines with the growth of the economy. Cyclical unemployment figures in India are negligible.

Knowledge Base:

National Sample Survey Organization (NSSO) defines employment and unemployment on the following activity statuses of an individual. NSSO, an organization under MoSPI – Ministry of Statistics and Programme Implementation measures India's unemployment on three approaches:

- **Daily Status Approach:** unemployment status of a person under this approach is measured for each day in a reference week. A person having no gainful work even for one hour in a day is described as unemployed for that day.
- **Weekly Status Approach:** This approach highlights the record of those persons who did not have gainful work or were unemployed even for an hour on any day of the week preceding the date of the survey.
- **Usual Status Approach:** This gives the estimates of those persons who were unemployed or had no gainful work for a major time during the 365 days.

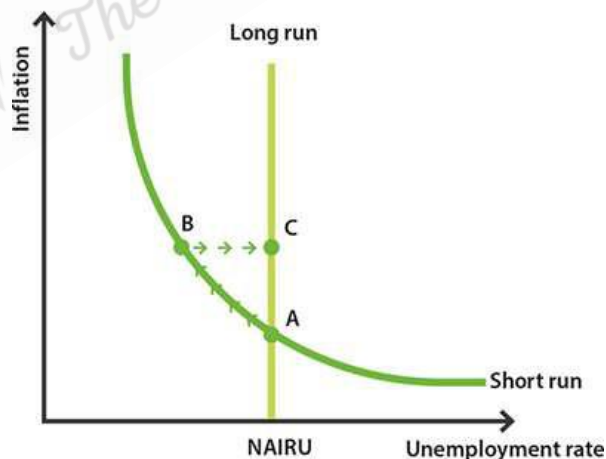
81. The term 'Non-Accelerating Inflation Rate of Unemployment'(NAIRU), often seen in the news, implies that

- a) It is the rate of unemployment that occurs with changes in economic activity over a business cycle.
- b) It is the lowest unemployment rate that can be sustained without causing wages growth and inflation to rise.
- c) It is the rate of unemployment under which there is a mismatch between the jobs that are available and the people looking for work.
- d) It occurs when people are employed but are unable to afford goods due to high inflation.

Answer: B

Explanation:

- Non-Accelerating Inflation Rate of Unemployment' (NAIRU) is the lowest unemployment rate that can be sustained without causing wages growth and inflation to rise. It is a concept that helps us gauge how much 'spare capacity' there is in the economy. The NAIRU is that rate of unemployment which is consistent with a constant rate of inflation. It means at NAIRU, the upward and downward forces on price (inflation) and wage (unemployment) neutralise each other and there is no tendency of change in the rate of inflation.



82. With reference to changes in prices of commodities in an economy, consider the following pairs:

Terms	Description
1. Skewflation	Episodic rise in prices of all the commodities.
2. Reflation	A sudden increase in the price of some goods due to government action.
3. Stagflation	An economic situation of high inflation and high unemployment levels.

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

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

Answer: C

Explanation:

Inflation refers to a sustained, across-the-board price increase.

Pair 1 is incorrect:

- **Skewflation** is a situation when there is a price rise of one or a small group of commodities over a sustained period of time. Whereas 'a Relative Price Increase' is a reference to an episodic price rise pertaining to one or a small group of commodities.

Pair 2 is correct:

- **Reflation** is a situation often deliberately brought by the government to reduce unemployment and increase demand by going for higher levels of economic growth. Governments go for higher public expenditures, tax cuts, interest rate cuts, etc. It is seen when the government takes some economic policy decisions to revive the economy from recession, then certain goods see sudden and temporary increase in their prices. This price rise is known as reflation.

Pair 3 is correct:

- **Stagflation** is a situation in an economy when inflation and unemployment both are at higher levels. Such a situation first arose in the 1970s in the US economy (average unemployment rate above 6 percent and the average rate of inflation above 7 per cent) and in many Euro-American economies. This took place as a result of oil price increases of 1973 and 1979 and anticipation of higher inflation. When the economy is passing through the cycle of stagnation (i.e., long period of low aggregate demand in relation to its productive capacity) and the government shuffles with the economic policy, a sudden and temporary price rise is seen in some of the goods. This inflation is also known as stagflation.

83. The term 'base effect' is related to which of the following?

- a) The impact of aggregate demand on the exchange rate of a currency.
- b) The value of a country's currency in terms of a basket of international currencies.
- c) The impact of the previous year's inflation on the current year's inflation.
- d) The impact of the supply of goods on their prices.

Answer: C

Explanation

- Base effect a riddle for economic indicators. It is a term generally used in Inflation. It refers to the impact of an increase in the price level (i.e. previous year's inflation) over the corresponding rise in price levels in the current year (i.e., current inflation). If the inflation rate was low in the corresponding

period of the last year, then even a small increase in the price index will give a high rate of inflation in the current year. Similarly, if there is a rise in the price index in the corresponding period of last year and recorded high inflation, then an absolute increase in the price index will show a lower inflation rate in the present year.

84. With regards to characteristics of recession, which of the following statements is/are correct?

1. Rise in price of gold and silver
2. High retrenchment
3. Reduction in interest rates
4. Increase in corporate bond yield
5. Increase in exports

Select the correct answer using the code given below:

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

Answer: A

Explanation:

- Recession is a slowdown or a massive contraction in economic activities. A significant fall in spending generally leads to a recession. Such a slowdown in economic activities may last for some quarters there by completely hampering the growth of an economy. In such a situation, economic indicators such as GDP, corporate profits, employments, etc., fall.

Characteristics of recession:

Statement 1 is correct:

- Rise in price of gold and silver- In recession, people who have money do not want to take risk by investing in real estate or stock market. They resort to buying gold and silver. Thus, its price rise in recession.

Statement 2 is correct:

- High retrenchment- Retrenchment/lay off increase in the industries as demand drops and industries resorted to production cuts.

Statement 3 is correct:

- Interest rate drops- as government try to induce people to invest more and save less by reducing interest rate.

Statement 4 is incorrect:

- Corporate bond yield decrease- Falling interest rates make bond prices rise and bond yields fall. Conversely, rising interest rates cause bond prices to fall, and bond yields to rise.

Statement 5 is incorrect:

- Exports decrease- Recession leads to less production due to less demand and the high price of labour and thus exports decrease.

85. Which of the following statements is/are correct regarding the Societal Poverty Line?

1. It was introduced by the World Bank
2. It captures the relative aspects of poverty.

Select the correct answer using the code given below:

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

Answer: C

Explanation:

Statement 1 is correct:

- In 2018, the World Bank introduced a Societal Poverty Line (SPL).

Statement 2 is correct:

- This was introduced to capture the relative aspect of poverty. The SPL is a hybrid line, combining the US\$1.90-a-day absolute poverty line with a relative component that increases as median consumption or income in an economy rises. Knowledge Base: As per the revised measures (2017), the World Bank defines extreme poverty as someone living on less than US\$1.90 per day. This figure is known as the International Poverty Line (IPL).

86. Which of the following measures can be taken to check Demand-Pull Inflation?

1. Increasing imports of goods which are short in supply
2. Increase in CRR and SLR by RBI
3. Increasing interest on loans
4. Reducing public expenditure, especially consumptive type

Select the correct option using the code given below:

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

Answer: D

Explanation:

Statement 1 is correct:

- Easing/ improving the supply of an item in high demand and short supply to ease down its price by importing, etc. is a Supply Side measure to combat inflation. For example, when the price of pulses were skyrocketing in 2017 due to low domestic production, the government imported a record amount of pulses to stabilise the prices of this essential food item.

Statement 2 is correct:

- When the Central Banks use a Dear Money policy - that is - increasing key policy rates like Repo Rate, CRR, SLR, etc, the banks are obliged to retain more reserves, as well as discouraged to lend out more, due to the high rates they have to pay. This reduces money supply in the system and individuals and businesses are unable to demand more, thus easing demand side inflation.

Statement 3 is correct:

- Higher interest rates on loans reduce the demand in related sectors of the economy, thus easing the demand pressure which was causing inflation. For example, increasing the rates of home loans can help curb the inflation in prices of bricks, mortar etc.

Statement 4 is correct:

- By reducing the money the government is pumping into the economy, especially consumptive, non-capital type, like salaries, HRA, DA, pensions, tax free incomes, etc. the government reduces the disposable income of households, thus curbing the pressure of demand from these economic agents, thus reducing inflation from the demand side.

87. Which among the following are categorised as Above-the-Line fiscal measures?

1. Capital Grants
2. Loans and Credit Guarantees
3. Schemes like MGNREGA
4. Tax Cuts
5. Direct Transfers

Select the correct option using the code given below:

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

Answer: C

Explanation:

- “Above the line” measures are revenue and expenditure measures, which have fiscal implications.
- “Above the line” measures refer to increases in government expenditures and reductions in tax revenues. Above-the-line measures include those for which full cost is reflected in the fiscal deficit, government debt, and increased borrowing needs in the short term. These measures include additional spending, capital grants and targeted transfers or tax measures. Below-the-line measures are those that involve the creation of assets, like equity injections, loans and asset purchase. Below-the-line may have little or no upfront impact on the fiscal deficit although they can later increase debt or reduce liquidity.

Option 1 is correct:

- Capital Grants are a part of Capital Expenditure of a government in the Government's budget, and are used in the calculation of the fiscal deficit.

Option 2 is incorrect:

- Loans and Credit Guarantees are not reflected in government debt immediately. However, they may increase government liability in the long run. It is thus a part of Below-the-Line fiscal measures.

Option 3 is correct:

- Schemes like employment guarantee (MGNREGA) that boost economic activity but increase government expenditure, ultimately forming a part of the fiscal deficit, are a part of Above-the-Line fiscal measures.

Option 4 is correct:

- Tax Measures like tax reliefs and cuts increase government debts by reducing revenues are also a part of Above-the-Line fiscal measures.

Option 5 is correct:

- Direct/ Targeted Transfers from government to citizens like DBT also form a part of government liabilities directly and are a part of Above-the-Line fiscal measures.

Knowledge Base:

Other Above-the-Line fiscal measures:

- Increasing government expenditures (such as subsidised food programmes or health facilities etc.)
- Reducing government revenues (by providing a tax cut or any such relief to consumers and businesses etc.)
- Below-the-Line fiscal measures: these may have little or no upfront impact on the fiscal deficit although they can later increase debt or reduce liquidity.
 - creation of assets
 - equity injections
 - loans
 - Asset purchase

88. With reference to the Indian economy, consider the following statements:

1. Under a counter-cyclical fiscal policy, the government decreases expenditure during a recession.
2. During a boom in the economy, countercyclical fiscal policy aims at reducing taxes to control inflation.
3. Counter-cyclical fiscal policy can help in crowding in private investment.

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

Statement 1 is incorrect:

- Counter-cyclical fiscal policy refers to the steps taken by the government that go against the direction of the economic or business cycle. Thus, in a recession or slowdown, the government increases expenditure and reduces taxes to create a demand that can drive an economic boom.

Statement 2 is incorrect:

- During a boom in the economy, counter-cyclical fiscal policy aims at raising taxes and cutting public expenditure to control inflation and debt.

Statement 3 is correct:

- An expansion in government expenditure cushions the contraction in output by offsetting the decline in consumption and investment. Higher government spending builds confidence in tough times. This in turn gives confidence to the private sector that the economy will not fluctuate too much. It helps businessmen overcome risk aversion and brings investment.

89. With reference to the concept of business cycle, consider the following statements:

1. It is a microeconomic concept that explains the growth dynamics of individual companies.
2. Boom stage may be characterized as a mismatch between demand and supply.

Which of the given statements is/are correct?

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

Answer: B

Explanation:

Statement 1 is incorrect:

- Business cycle is a macroeconomic concept that explains why and how economies fluctuate between best and worst levels of economic activities. It does not pertain to any one individual company but rather analyses the economy as a whole.

Statement 2 is correct:

- During the recovery stage of an economy, the investment level (GCF) slowly increases, and more jobs are created. This leads to an increase in income and savings of households. As a result, demand and consumption of goods also increases. This leads to higher profits, even greater investment and higher incomes. If this continues further it may so happen that the demand peaks up to such a high level that it exceeds sustainable production/supply levels. This is called the boom stage. In this stage, there is a mismatch between demand and supply. This generally leads to a price rise and can also cause structural problems like shortage of investible capital, low savings, fall in standard of living etc.

90. Which of the following impacts of high inflation can be seen in an economy?

1. Benefit to the creditors
2. Unemployment decreases in short-term
3. Depreciation of currency

Select the correct answer using the code given below:

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

Answer: C

Explanation:

Statement 1 is incorrect:

- Debtors borrow money from creditors to pay the later with interest on a future date. During inflation when prices rise, the value of money goes down, the debtor pays less in real term than what they had borrowed. Thus, debtors are the gainers and creditors are the losers.

Statement 2 is correct:

- When prices rise the producers, traders, entrepreneurs gain as price rise is faster than the cost of production in short-term. This results in increased employment. This inverse relationship between unemployment and inflation can be depicted by the Phillip curve

Statement 3 is correct:

- High inflation results in low interest rates in a country. This also results in high demand and less supply of goods and services. Low interest rates do not attract foreign investment. So, there is less supply of foreign currency and high demand, which results in depreciation of the local currency.

Knowledge Base:

- Wage earners and other fixed salaried persons, generally suffer during inflation. Although they obtain an increase in wages but it does not rise as much as rise in price of commodities consumed by the workers. On the other hand, entrepreneurs gain during inflation due price of their products/services.

91. Which of the following is correct with reference to the Marginal Cost of Production?

- a) Producer gets profit if marginal cost is less than the average cost of production.
- b) It is defined as the total cost of production per unit produced.
- c) It remains fixed throughout time.
- d) Producers have to pay the marginal costs even when there is zero production.

Answer: A

Explanation:

- The Cost of Production is also called production costs or cost price. It is the total cost sustained by a business to produce a specific quantity of a product.

Statement A is correct:

- The marginal cost of production is the change in total production cost that comes from making or producing one additional unit. To calculate marginal cost, divide the change in production costs by the change in quantity. The purpose of analysing marginal cost is to determine at what point an organization can achieve economies of scale to optimize production and overall operations. If the marginal cost of producing one additional unit is lower than the average cost, the producer has the potential to gain a profit.

Statement B is incorrect:

- The average cost of production is defined as the total cost of production per unit produced. In simple words, average cost comes when the total cost of production is divided by the number of product units produced.

Statement C is incorrect:

- Fixed costs include those prices which don't change with time. Fixed costs as the name shows remain fixed throughout the time. Option d is incorrect: Fixed costs don't depend on the amount of production. Producers have to pay fixed costs for it even when there is zero production or no profits.

92. If the Gross Domestic Product (GDP) of a country is increasing constantly, then which of the following is definitely true?

1. The quality and standard of life is increasing within the middle class and lower class in the same proportion.
2. The income inequality is decreasing in the country.
3. The resources available to people in the country are increasing.
4. The unemployment rate will decline in the country.

Select the correct answer from the code given below:

- a) 1 and 2 only
- b) 3 only
- c) 2, 3 and 4 only
- d) None

Answer: B

Explanation:

- Gross domestic product, or GDP, measures the total output of the economy, including activity, stability, and growth of goods and services; as such, it's seen as a proxy for the economy.

Statement 1 is incorrect:

- Economic growth and economic development may mean that the quality of life increases faster within the middle class than within the lower class. The lower class may not gain in the same proportion as individuals who are placed in higher income groups.

Statement 2 is incorrect:

- The rising GDP may or may not lead to decline in inequality depending upon the distribution of the income.

Statement 3 is correct:

- Rising GDP means the economy is growing, and the resources available to people in the country – goods and services, wages and profits – are increasing.

Statement 4 is incorrect:

- GDP and unemployment rates usually go together because a decrease in the GDP is reflected in a decrease in the rate of employment. A rise in employment levels is a natural result of increased GDP levels caused by an increase in consumer demands for goods and services. But we have seen instances of jobless growth in India (constant unemployment despite rising GDP).

93. Which of the following is/are the possible impacts of Currency Swap?

1. Increase Exports of goods and commodities.
2. Help in fund and currency risk management
3. Increases volatility in foreign exchange markets
4. Higher depreciation of domestic currency

Select the correct answer using the code given below.

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

Answer: A

Explanation:

- A currency swap is undertaken when a party has a liability into another currency, in order to take advantage of favourable interest rate or interest rate movement, whereas a counter party has a liability in the latter currency, which it wishes to convert into liability in the former currency.

Statement 1 is correct:

- A Currency Swap as a pact between two countries allows trading in their own currency and payments to import and export trade at pre-determined exchange rates without bringing in a third currency. It helps the countries to swap currencies with trade partner countries that may increase exports and bring down trade deficit.

Statement 2 is correct:

- The currency swap agreements help in fund management and currency risk management as it holds the ability to hedge currency risk. It can potentially benefit from access to international financial markets without currency mismatch if a non-resident can successfully issue local currency debt to provide a swap counterparty.

Statement 3 is incorrect:

- Currency Swap agreements which involve exchange of one currency for another currency, provide confidence to the market and prevent excess volatility in financial and foreign exchange markets.

Statement 4 is incorrect:

- A Currency Swap agreement can help countries in supporting their depreciated domestic currency against the currency of other country that could help to increase the funding requirements of the nation for their domestic growth. A dollar swap arrangement of India with US could help India in supporting the depreciating rupee, against the US currency.

94. With reference to the Cash reserve ratio (CRR) and Statutory liquidity ratio (SLR), consider the following statements:

1. Small finance banks and payments banks need not maintain CRR
2. The CRR has to be maintained in cash whereas the SLR can be maintained either in cash or in assets.
3. Unlike CRR, the banks don't earn any returns from the money maintained in the form of SLR.
4. The CRR meet short-term liquidity requirements whereas the SLR controls excess money flow in the economy.

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

- Cash reserve ratio (CRR) and Statutory liquidity ratio (SLR) are known as Quantitative instruments of Monetary Policy where certain interest rate is set by the central bank of the country and that rate applies to banking system of the country as a whole. A certain fraction of total assets is always kept by banks in a current account maintained by the central bank (RBI). Banks do not have access to that money to comply with the statutory reserve requirements and partially for meeting day-to day cash payments in form of Cash Reserve Ratio. While in SLR the commercial bank has to maintain the deposits in the form of liquid cash, gold or other securities with themselves only.

Statement 1 is incorrect:

- Every scheduled bank, small finance bank and payments bank shall maintain minimum CRR. Every Scheduled Commercial Bank (including RRBs), Local Area Bank, Small Finance Bank, Payments Bank, Primary (urban) co-operative bank and State and central co-operative banks shall continue to maintain 'SLR assets.

Statement 2 is correct:

- CRR are assets kept by banks as cash partially to comply with the statutory reserve requirements and partially for meeting day-to-day cash payments. While SLR are time and demand deposits in assets specified by RBI which are maintained in form of gold, and government bonds and securities.

Statement 3 is incorrect:

- Banks don't earn any returns from the money parked in the form of CRR. However, banks can earn returns from SLR because, under SLR requirements, banks are supposed to invest in liquid assets like central and state government securities/bonds and these bonds earn banks some interest.

Statement 4 is correct:

- The RBI uses the CRR as a tool of controlling money supply and meet short term liquidity requirements. In case of inflation, CRR is increased, thus decreasing the lending ability of banks. Alternately, by lowering the CRR, credit expansion by banks increases. While the central bank uses SLR to check the money supply in the economy. Increasing SLR decreases liquidity in economy and vice-versa.

95. Which one is correct with reference to Central Bank Digital Currency (CBDC)?

1. CBDC is just a wallet or an electronic purse, issued by a central bank.
2. It cannot be exchanged for cash
3. CBDC will be based on blockchain technology and will be regulated by the RBI.

Select the correct answer using the code given below.

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

Answer: C

Explanation:

- Central Bank Digital Currency (CBDC) is a digital form of Fiat Currency which can be transacted using wallets backed by blockchain and is regulated by the central bank. It is the sovereign currency in an electronic form and it would appear as a liability (currency in circulation) on a central bank's balance sheet.

Statement 1 is correct:

- CBDC is just a wallet or an electronic purse, issued by a central bank. There are many such wallets operating in the Indian financial system. The CBDC will be one of them, but with a difference that it will be issued by the nation's central bank.

Statement 2 is incorrect:

- The digital rupee could be exchanged for cash and will open new opportunities in the fintech sector.

Statement 3 is correct:

- CBDC will be based on blockchain technology and in the Indian context, it will be regulated by the RBI.

96. Which of the following pairs are correctly matched?

List I Terms	List II Description
1. Securitization	It is the method of converting existing assets into securities.
2. Cumulative shares	Shares that are entitled to receive dividends of a particular year in the coming years.
3. Buy back	The investor buys the

	securities without owning the securities
4. Short selling	It refers to the issuer buying the securities again to accumulate shares in his hands.

Select the correct answer using the code given below:

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

Answer: A

Explanation:

Pair 1 is correct:

- Securitisation is the method of converting existing assets into securities. For example, in case of banks, their unrecovered loans are considered as non-performing assets (NPA). These assets are sold to Asset Reconstruction Companies (ARCs). The asset reconstruction company divides the total assets into equal parts and sells to investors. The investors are entitled to flow of interest income from these assets and principal amount when repaid.

Pair 2 is correct:

- Cumulative Shares are shares that are entitled to receive dividends of a particular year in the coming years, including those that were missed previously, as arrear if the company had not given dividend in that particular year. Non-cumulative shares don't have that right.

Pair 3 is incorrect:

- A buyback, also known as a share repurchase, is when a company buys its own outstanding shares to reduce the number of shares available on the open market.

Pair 4 is incorrect:

- In short selling, the seller sells the securities without owning the securities. It involves borrowing a security and selling it on the open market.

97. With reference to Participatory notes (P notes), consider the following statements:

1. They are issued by registered foreign portfolio investors (FPIs) to overseas investors.
2. Investments flowing through P-notes are considered as offshore derivative investments (ODIs).
3. The investors in P-Notes derive the economic benefits of investing in the security without actually holding it.

Which of the statements given above is/are correct?

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

Answer: D

Explanation:

Statement 1 is correct:

- P-notes are issued by registered foreign portfolio investors (FPIs), to overseas investors who wish to be part of the Indian stock market without registering themselves directly.

Statement 2 is correct:

- Investments flowing through P-notes are considered as offshore derivative investments (ODIs). Indian securities market regulator, SEBI issued the new Regulations for Foreign Portfolio Investors, participatory notes where it got formally defined under the tag "Offshore Derivative Instrument" (ODIs)

in Section 2(1)(j) of the said regulation.

Statement 3 is correct:

- The P-notes holder does not enjoy any voting rights in relation to security/shares referenced. Also, the investor in P-notes does not own the underlying Indian security, which is held by the FII who issues the Participatory Notes. Thus, the investors in Participatory Notes derive the economic benefits of investing in the security without actually holding it.

98. In the context of RBI's Repo operations, consider the following statements:

1. For Repo transactions, the Reserve Bank of India accepts Oil bonds issued by government as collateral.
2. A cut in the repo rate will prove beneficial to depositors and debt mutual fund investors.

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: A

Explanation:

Statement 1 is correct:

- Repos and Reverse Repos can be undertaken in all SLR-eligible transferable Government of India dated Securities/Treasury Bills as collateral. Oil bonds issued by the government also qualify as eligible securities for repos, reverse repos and Marginal Standing Facility (MSF). Repo is a money market instrument, which enables collateralised short-term borrowing and lending through sale/purchase operations in debt instruments.

Statement 2 is incorrect:

- A cut in the repo rate can lead to the banks bringing down their lending rate. This can prove to be beneficial for retail loan borrowers by bringing down the loan EMIs. Depositors will suffer due to decline in interest rate and so will debt mutual fund investors as long-dated funds may not gain the way they normally do after a rate cut, and short-term funds will see their returns fall. This is because the prices of bonds rise when interest rates fall. RBI uses Repo Rate (and Reverse Repo Rate) to control the money supply. When it wants to lower the money supply it raises the Repo Rate & similarly when it wants to increase the money supply it reduces the Repo Rate.

99. It is the total value of finished goods and services produced by a country's citizens overseas and domestically, minus depreciation. It is considered as the purest form of income. It is used in finding per capita income of a nation.

Which of the following income accounting method is described in the above given paragraph?

- a) Net Domestic Product
- b) Gross National Product
- c) Net National Product
- d) Gross Domestic product

Answer: C

Explanation:

- **Net national product (NNP)** is the monetary value of finished goods and services produced by a country's citizens, overseas and domestically, in a given period. It is the equivalent of gross national product (GNP), the total value of a nation's annual output, minus the amount of GNP required to purchase new goods to maintain existing stock, otherwise known as depreciation. However, the Central Statistics Office (CSO) under the Ministry of Statistics and Program Implementation defines National Income of India as Net National Income at Market Price. $\text{Net National Product (NNP)} \equiv \text{GNP} - \text{depreciation}$. It is considered as the purest form of income due to subtraction of depreciation. Net

National Product divided by the population of the country gives per capita income of a nation.

100. Which of the following statements with reference to Gross Value Added (GVA) method is/ are correct?

1. GVA at factor cost is generally lesser than GVA at basic price.
2. GVA at basic prices is calculated using production taxes and subsidies.
3. GVA at market price is calculated using product taxes and subsidies.

Select the correct answer using the code given below:

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

Answer: D

Explanation:

Statement 1 is correct:

- Gross Value Added (GVA) at factor cost is generally lesser than GVA at basic price, as GVA at Basic Price includes taxes net of subsidies, which increases the end value. $GVA \text{ at Basic Prices} = GVA \text{ at factor cost} + (\text{Production taxes less Production subsidies})$

Statement 2 is correct:

- GVA at Basic Prices is calculated using production taxes and subsidies. It is the GDP calculation which uses Product taxes and subsidies.

Statement 3 is correct:

- $GDP \text{ at market prices} = GVA \text{ at basic prices} + \text{Product taxes} - \text{Product subsidies}$
- The Gross Value Added at market price is the difference between the value of output and Intermediate Consumption, where the value of output is the domestic sales.