

Auditing Course Material

Part 59 of 61 (Chapters 5801-5900)

7. RAMSAR Wetland Sites

The Ramsar Convention is an international agreement promoting the conservation of wetlands. The Convention was adopted at Ramsar in Iran in 1971 and came into force in 1975. It is an international treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value. These sites include a variety of wetland types such as marshes, swamps, lakes, rivers, and coastal areas. Designation as a Ramsar Wetland Site signifies a commitment to the wise use of wetlands, emphasizing their ecological, cultural, scientific, and recreational values while ensuring their long-term preservation.



Key facts related to Ramsar Wetlands in India are given below:

- As of August 2024, India has 82 Ramsar wetland sites.
- In 1981, Chilika Lake was designated the first Indian wetland of international importance under the Ramsar Convention.
- Tamil Nadu has maximum number of Ramsar sites (14 in number).
- India became a party in 1982.

Note

A 'wetland' is defined as any land area that is saturated or flooded with water, either seasonally or permanently such as lakes, aquifers and marshes, mangroves, peatlands, estuaries, coral reefs, etc.

The Montreux Record is a register of sites listed under the Ramsar Convention that require special attention due to changes in ecological character. Established in 1990, the Montreux Record serves as a tool to highlight wetland sites that face or have faced human-induced threats that could jeopardize their ecological character. Sites are added to the Montreux Record when there is a need for international assistance in resolving the issues affecting their ecological integrity.

8. Important Coastal and Marine Biodiversity Areas

India has taken several steps to conserve a substantial portion of the coastal and marine areas in the country. Around 106 coastal and marine sites have been identified and prioritized as Important Coastal and Marine Biodiversity Areas (ICMBAs) by the Wildlife Institute of India, Dehradun. These sites have also been proposed as conservation or communities reserves to increase participation of the local communities in governance.

The Government of India instituted an 'Amrita Devi Bishnoi National Award for Wildlife Conservation' in the memory of Amrita Devi Bishnoi, who in 1731, sacrificed her life along with 363 others for the protection of 'khejri' trees in Khejrali village near Jodhpur in Rajasthan.

9. India State of Forest Report 2021

India State of Forest Report (ISFR) is an assessment of India's forest and tree cover, published every 2 years by the Forest Survey of India (under the MoEF&CC). The first survey was published in 1987, and ISFR 2021 is the 17th edition of the Report. The data for the Report is computed through wall-to-wall mapping of India's forest cover through remote sensing technique.

The latest India State of Forest Report (ISFR), 2021 was released in January 2022. Key highlights of the Report are given below:

- Total forest cover: 21.71% of the geographical area of India
- Top 3 states in Total Forest cover: Madhya Pradesh, Arunachal Pradesh, Chhattisgarh.
- Top 3 states by percent of State's Geographic Area under Forest Cover: Mizoram (84.53%), Arunachal Pradesh (79.33%), Meghalaya.
- Total tree cover: 2.91% of the geographical area of India.
- State with Maximum Tree cover: Maharashtra.
- Tree Outside Forests: 36.18% of the total forest and tree cover of India.
- Total Area of Mangrove Cover: 0.15% of country's geographical area.
- Top States & UTs with Mangrove Cover: West Bengal, Gujarat, Andaman & Nicobar Islands.
- Forest Cover in the Tiger Reserve: 7.80% of the country's total forest cover

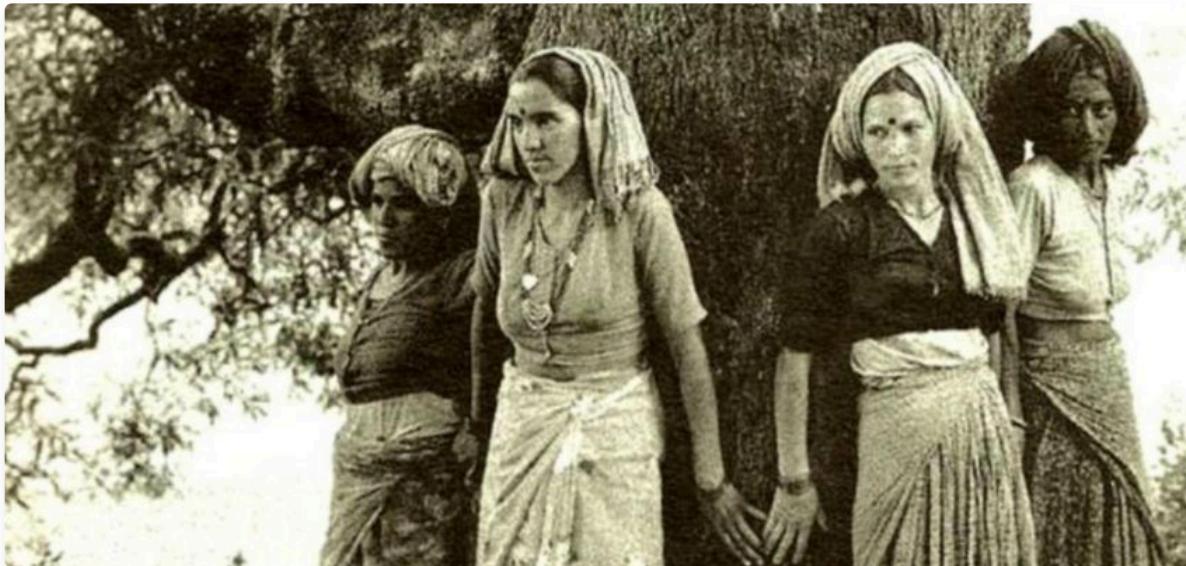
Key Definitions

Some of key definitions are:

- *Forest Cover*: Forest Cover refers to all lands more than 1 hectare in area, with a tree canopy density of more than 10% irrespective of ownership and legal status. Such lands may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm.
 - *Recorded Forest Area (RFA)*: It refers to all the geographic areas recorded as 'Forests' in government records. It consists of Reserved Forests and Protected Forests which have been constituted under the provisions of the Indian Forest Act, 1927.
 - *Green Wash*: The extent of wooded areas generally shown in light green colour on the Survey of India toposheets.
 - *Tree Cover*: Tree patches outside recorded forest areas exclusive of forest cover and less than the minimum mappable area of one hectare.
 - *Carbon Stock*: Forest carbon stock is the amount of carbon that has been sequestered from the atmosphere and is now stored within the forest ecosystem, mainly within living biomass and soil, and to a lesser extent also in dead wood and litter.
 - *Open Forest (OF)*: Lands with forest cover having a canopy density between 10 to 40 percent.
 - *Dense Forest*: All lands with a forest cover having a canopy density of 40% and above.
 - *Moderately Dense Forest (MDF)*: All lands with forest cover having a canopy density between 40 -70%.
 - *Very Dense Forest (VDF)*: Lands with forest cover having a canopy density of 70% and above.
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10. Chipko Movement

The Chipko Andolan ('Hug the Trees Movement') was the result of a grassroot level effort to end the alienation of people from their forests. The movement originated from an incident in a remote village called Reni in Garhwal, high-up in the Himalayas during the early 1970s. There was a dispute between the local villagers and a logging contractor who had been allowed to fell trees in a forest close to the village. On a particular day, the contractor's workers appeared in the forest to cut the trees while the men folk were absent. Undeterred, the women of the village reached the forest quickly and clasped the tree trunks thus preventing the workers from felling the trees. Thus thwarted, the contractor had to withdraw.



The Movement was characterized by non-violent protests against deforestation and the unsustainable logging practices that were negatively impacting the local communities and the environment. The Movement was best remembered for the collective mobilisation of women for the cause of preserving forests, which also brought about a change in attitude regarding their own status in society.

The movement was led by environmentalist Sunderlal Bahuguna, who played a crucial role in mobilizing the local communities. Women were prominent participants in the movement, and their involvement brought attention to the impact of deforestation on daily life and sustenance.

Similarly, Appiko movement (1983) was led by Panduranga Hegde in Karnataka. It was inspired by the Chipko movement and included women in Karnataka's Western Ghats embracing trees to prevent deforestation.

1. Introduction

India is one of the ten most disaster-prone countries in the world. India, due to its unique geo-climatic and socio-economic conditions, is vulnerable, in varying degrees, to floods, droughts, cyclones, tsunamis, earthquakes, urban flooding, landslides, avalanches and forest fires.

The nation is susceptible to disasters due to various factors, encompassing both natural and human-induced elements. These include adverse geo-climatic conditions, topographic features, environmental degradation, population growth, urbanization, industrialization, and non-scientific development practices.

Out of 36 States and Union Territories (UTs) in the country, 27 are disaster prone. 58.6% landmass is prone to earthquakes of moderate to very high intensity; 12% land is prone to flood and river erosion; out of 7,516 km coastline, 5,700 km is prone to cyclones and tsunamis; 68% of the cultivable land is vulnerable to drought, hilly areas are at risk from landslides and avalanches, and 15% of landmass is prone to landslides.

A 'hazard' and 'disaster', in relation to emergency disaster preparedness can be defined as:

- A *hazard*, in relation to emergency disaster preparedness, can be defined as any source of potential damage, harm or adverse health effects to life, health, property or the environment.
- A *disaster*, in relation to emergency disaster preparedness, can be defined as a devastating impact of a hazard that negatively affects life, health, property or the environment on a scale sufficient to require outside assistance.

The United Nations International Strategy for Disaster Reduction (UNISDR, 2009) defines 'disaster' as:

"A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources."

The Disaster Management Act, 2005 uses the following definition for 'disaster':

"Disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area."

UNISDR

Established in December 1999, the United Nations Office for Disaster Risk Reduction (UNISDR) operates under the United Nations Secretariat. Its multifaceted functions encompass the social, economic, environmental, and humanitarian domains. A significant aspect of UNISDR's mandate is to support the implementation, follow-up, and review of the Sendai Framework for Disaster Risk Reduction.

The Sendai Framework, adopted during the Third UN World Conference on Disaster Risk Reduction on March 18, 2015, in Sendai, Japan, serves as a 15-year voluntary and non-binding agreement. This framework represents a comprehensive and people-centered approach to disaster risk reduction, succeeding the preceding 2005-2015 Hyogo Framework for Action. With a broad scope, the Sendai Framework outlines strategies and initiatives aimed at mitigating the impact of disasters and fostering resilience on a global scale. UNISDR plays a pivotal role in advancing the objectives outlined in the Sendai Framework, contributing to global efforts to address the challenges posed by disaster risk.

2. Types of Disasters

Primarily disasters are triggered by natural hazards or human-induced, or result from a combination of both. In particular, human-induced factors can greatly aggravate the adverse impacts of a natural disaster. While heavy rains, cyclones, or earthquakes are all natural, the impacts may, and are usually, worsened by many factors related to human activity. The human society is also vulnerable to Chemical, Biological, Radiological, and Nuclear (CBRN) disasters.

Both types are discussed next.

1.Which of the following is not a natural hazard?

- Tsunami
- Earthquake
- Flash floods
- Nuclear accident

Check

Question: 1 of 1 questions

2. Types of Disasters

The Disaster Information Management System of DesInventar employs a comprehensive classification system for natural disasters, categorizing them into 5 main types:

1. Geophysical

Geophysical Disasters are a hazard originating from solid earth and encompasses geological processes or phenomena with the potential to cause various impacts, including loss of life, injury, property damage, disruption of livelihoods, and environmental harm. These disasters, triggered by factors such as earthquakes or volcanic eruptions, may also involve hydro-meteorological elements, and anomalies like tsunamis are considered oceanic hazards with coastal implications. This term can be used interchangeably with the term geological hazard. Some of the Geophysical hazards are discussed below.

Earthquake

An earthquake is a sudden and violent shaking of the ground, often caused by movements along geological faults resulting in the release of energy in the Earth's crust. This release of energy generates seismic waves that propagate through the Earth, causing the ground to shake. The point below the earth's surface where the earthquake starts is known as the hypocenter, while the corresponding point directly above it on the earth's surface is called the epicenter.

Earthquakes are detected and recorded by instruments called seismographs, and the resulting graphical representation is called a seismogram. The Richter magnitude scale, developed in 1935 by Charles F. Richter, is used to measure the severity of an earthquake. It is logarithmic scale that measures the magnitude of an earthquake. The scale ranges from 1 to 10, with each increase in number indicating a tenfold increase in ground motion. For example, an earthquake with a magnitude of 7 is ten times more powerful than an earthquake with a magnitude of 6.

In a nut shell, seismographs are used to measure earthquakes, and the Richter scale quantifies their magnitude from 1 to 10.

Magnitude	Type	Effect
3.0-3.9	Minor	Maybe Felt
4.0-4.9	Light	Likely Felt
5.0-5.9	Moderate	Minor damage may occur
6.0-6.9	Strong	Damage may occur
7.0-7.9	Major	Damage expected
8.0 or larger	Great	Minor damage may occur

Some of impacts of earthquakes are:

- Landslide following earthquake,
- Urban fires triggered by earthquakes,
- *Liquefaction* - the transformation of (partially) water-saturated soil from a solid state to a liquid state caused by an earthquake,
- Mass movement of earth materials, usually down slopes,
- Surface displacement of earthen materials due to ground shaking triggered by earthquakes.

Landslides

Landslides are the downward movement of rock, soil, and debris on a slope, often triggered by factors such as heavy rainfall, earthquakes, volcanic activity or human activities. They can vary in scale from small, localized movements to large, destructive events that impact extensive areas.

Volcano

A volcano is a geological feature that results from the eruption of magma (molten rock), ash, and gases from the Earth's crust to its surface. This process occurs through a vent or opening in the Earth's surface, often in areas with tectonic plate boundaries. When pressure builds up beneath the Earth's surface, it can lead to a volcanic eruption. During an eruption, molten rock, ash, and gases are expelled, creating various landforms such as lava flows, volcanic cones, and calderas.

Some of impacts of volcano are given below.

- Surface displacement of earthen materials due to ground shaking triggered by volcanic eruptions,
- A type of geological event near an opening/vent in the Earth's surface including volcanic eruptions of lava, ash, hot vapour, gas, and pyroclastic material,

- Ash fall; Lahar - Hot or cold mixture of earthen material flowing on the slope of a volcano either during or between volcanic eruptions,
- Lava Flow,
- Pyroclastic Flow - Extremely hot gases, ash, and other materials of more than 1,000 degrees Celsius that rapidly flow down the flank of a volcano (more than 700 km/h) during an eruption.

(iii) Tsunami

The term "tsunami" originates from the Japanese words "tsu" (harbor) and "nami" (wave), reflecting the fact that tsunamis can cause significant wave activity in harbours. It is a series of waves (with long wavelengths when traveling across the deep ocean) that are generated by a displacement of massive amounts of water through underwater earthquakes, volcanic eruptions or landslides. Tsunami waves travel at very high speed across the ocean but as they begin to reach shallow water, they slow down and the wave grows steeper.

The 2004 Indian Ocean tsunami, triggered by a massive undersea earthquake with a magnitude of 9.1–9.3 off the west coast of northern Sumatra, Indonesia, was one of the deadliest natural disasters in recorded history. The earthquake occurred on 26th December 2004, and resulted in a series of powerful tsunami waves that radiated across the Indian Ocean, affecting coastal regions in several countries, including India.

2. Hydrological

Hydrological Disaster is a hazard caused by the occurrence, movement, and distribution of the surface and sub-surface freshwater and saltwater. Some of the hazards associated with it are given below.

- *Avalanche* - a large mass of loosened earth material, snow, or ice that slides, flows or falls rapidly down a mountainside under the force of gravity
- *Coastal Erosion* - The temporary or permanent loss of sediments or landmass in coastal margins due to the action of waves, winds, tides, or anthropogenic activities.
- *Coastal Flood* - Higher-than-normal water levels along the coast caused by tidal changes or thunderstorms that result in flooding, which can last from days to weeks.
- *Debris Flow, Mud Flow, Rock Fall* - Types of landslides that occur when heavy rain or rapid snow/ice melt send large amounts of vegetation, mud, or rock down slope by gravitational forces.
- *Flash Flood Hydrological* - Heavy or excessive rainfall in a short period of time that produce immediate runoff, creating flooding conditions within minutes or a few hours during or after the rainfall.
- *Flood Hydrological* - A general term for the overflow of water from a stream channel onto normally dry land in the floodplain (riverine flooding), higher-than normal levels along the coast and in lakes or reservoirs (coastal flooding) as well as ponding of water at or near the point where the rain fell (flash floods).
- *Wave Action* - Wind-generated surface waves that can occur on the surface of any open body of water such as oceans, rivers and lakes, etc. The size of the wave depends on the strength of the wind and the travelled distance (fetch).

3. Meteorological

Meteorological Disasters are a result from short-lived or small to meso-scale atmospheric processes occurring over periods ranging from minutes to days. These events are driven by meteorological factors.

Some of the hazards associated with it are given below.

- Cyclone, Storm Surge, Tornado, Convective Storm, Extratropical Storm, Wind,
- Cold Wave, Derecho,
- Extreme Temperature, Fog, Frost, Freeze, Hail, Heat Wave
- Lightning, Heavy Rain,
- Sand-Storm, Dust Storm,
- Snow, Ice, Winter Storm, Blizzard

Description of some of these hazards are given below.

- *Derecho*: A derecho is a widespread and long-lived windstorm characterized by rapidly moving, straight-line winds. These intense windstorms can cause significant damage across a large geographic area. Derechos are often associated with thunderstorm complexes and can extend for hundreds of miles.
- *Frost*: Frost is a meteorological event where the temperature of the air and surfaces drops low enough for water vapor to freeze into ice crystals. It commonly occurs on clear, calm nights. It can damage or kill plants, especially those sensitive to cold temperatures.
- *Hail*: Hail is a form of solid precipitation that consists of balls or lumps of ice known as hailstones. It is often associated with severe thunderstorms. It is formed when updrafts in thunderstorms carry raindrops into extremely cold areas of the atmosphere

where they freeze.

- *Blizzard*: A blizzard is a severe snowstorm characterized by strong winds, low temperatures, and reduced visibility due to blowing snow. The conditions include sustained winds of at least 35 miles (56 km/hour) per hour and visibility reduced to less than a quarter mile due to blowing snow. Blizzards can result in drifting snow, creating hazardous travel conditions.

Cyclone

Cyclones are caused by atmospheric disturbances around a low-pressure area distinguished by swift and often destructive air circulation. Cyclones are usually accompanied by violent storms and bad weather. The air circulates inward in an anticyclonic direction in the Northern hemisphere and clockwise in the Southern hemisphere.

Worldwide Terminology

Cyclones are given many names in different regions of the world – They are known as typhoons in the China Sea and Pacific Ocean; hurricanes in the West Indian islands in the Caribbean Sea and Atlantic Ocean; tornados in the Guinea lands of West Africa and southern USA.; willy-willies in north-western Australia and tropical cyclones in the Indian Ocean.

The criteria below has been formulated by the Indian Meteorological Department (IMD), which classifies the low pressure systems in the Bay of Bengal and the Arabian Sea on the basis of capacity to damage, which is adopted by the WMO.

Type of Disturbances Wind Speed in Km/h Wind Speed in Knots

Low Pressure	Less than 31	Less than 17
Depression	31-49	17-27
Deep Depression	49-61	27-33
Cyclonic Storm	61-88	33-47
Severe Cyclonic Storm	88-117	47-63
Super Cyclone	More than 221	More than 120

Cyclones are classified into 5 different levels on the basis of wind speed. They are further divided into the following categories according to their capacity to cause damage:

Cyclone Category Wind Speed in Km/h Damage Capacity

01	120-150	Minimal
02	150-180	Moderate
03	180-210	Extensive
04	210-250	Extreme
05	250 and above	Catastrophic

4. Climatological

Climatological Disasters are stem from long-lived meso- to macro-scale processes, spanning intra-seasonal to multi-decadal climate variability. These events have prolonged impacts on climate and weather patterns. Some of the hazards associated with it are given below.

- Drought
- Extreme hot/cold conditions
- Forest/Wildfire Fires
- Glacial Lake Outburst
- Subsidence

Description of some of these hazards are given below.

- *Drought*: It is an extended period of abnormally low precipitation, resulting in water shortages that can have significant impacts on ecosystems, agriculture, and water supplies. It can lead to water scarcity, reduced soil moisture, and depletion of reservoirs and aquifers. Impacts include crop failure, reduced water availability for households, and stress on ecosystems.
- *Wildfire*: A wildfire, also known as a forest or bushfire, is an uncontrolled fire that spreads rapidly through vegetation, often fueled by dry conditions and wind. Wildfires can be sparked by lightning, human activities, or other ignition sources. They can spread quickly, consuming forests, grasslands, and structures.
- *Subsidence*: It refers to the gradual sinking or settling of the Earth's surface. It can occur naturally or be induced by human activities. Natural Subsidence is when Geological processes, such as the compaction of sediments or the dissolution of underground minerals (karst processes), can lead to natural subsidence. Human-Induced Subsidence are activities such as

groundwater extraction, mining, and oil and gas extraction can cause subsidence. When fluids are removed from the Earth, the pore spaces in rocks or sediments collapse, resulting in ground settlement.

5. Biological

Biological Disasters involve processes or phenomena of organic origin or transmitted by biological vectors. This category includes exposure to pathogenic micro-organisms, toxins, and bioactive substances, leading to potential impacts on human health, property, livelihoods, and the environment. Some of the hazards associated with it are given below.

- *Epidemics*: viral, bacterial, parasitic, fungal, or prion infections (rapid spread of infectious disease to a large number of people in a given population)
- *Insect infestations*: insects or parasites invade an area, human, plant, or animal.
- Animal stampedes

In a nutshell, following are the related hazards associated with a particular classification:

- Geophysical (earthquakes, landslides, tsunamis and volcanic activity)
- Hydrological (avalanches and floods),
- Climatological (extreme temperatures, drought and wildfires)
- Meteorological (lightening, cyclones and storms/wave surges, blizzard (Snow Storm))
- Biological (disease epidemics and insect/animal plagues).

1. Meaning of Tsunami is? (**UGC NET 6th Mar 2023 Morning Shift**)

Oceanic wave

Harbour Wave

Oceanic earthquake

Coastal Wave

Check

Question: 1 of 5 questions

2. Types of Disasters

Human-induced disasters are events or situations that result from human actions, negligence, or improper management, leading to significant harm, damage, or adverse impacts. Unlike natural disasters, which arise from natural processes, human-induced disasters are the result of human activities. These disasters can have widespread and long-lasting consequences, affecting communities, economies, and ecosystems.

Some common type of human-induced disasters are given below.

- *Industrial Accidents:* Accidents that occur in industrial settings, often involving the release of hazardous materials or the failure of industrial processes. Examples include Chemical spills, industrial explosions, nuclear accidents.
- *Technological Accidents:* Disasters resulting from failures or malfunctions in technological systems, including transportation and communication. Examples include Plane crashes, train derailments, power grid failures.
- *Environmental Pollution:* Contamination of the environment with harmful substances, impacting air, water, and soil quality. Examples include Air pollution, water pollution, soil contamination.
- *Deforestation and Land Degradation:* Human activities that lead to the clearance of forests and degradation of land, disrupting ecosystems and increasing the risk of natural disasters. Examples include clear-cutting of forests, improper land-use practices.
- *Urbanization and Infrastructure Failure:* Problems arising from rapid urban development, inadequate infrastructure planning, and poorly designed buildings. Examples include Urban flooding due to inadequate drainage, building collapses.
- *Resource Depletion:* Overexploitation of natural resources, leading to scarcity and environmental degradation. Examples include Depletion of groundwater, overfishing, deforestation.
- *Climate Change:* Long-term changes in climate patterns resulting from human activities, primarily the emission of greenhouse gases. Examples include rising temperatures, extreme weather events, sea-level rise.
- *Social and Political Conflicts:* Disasters arising from conflicts, wars, or social unrest that result in widespread displacement, suffering, and loss. Examples include civil wars, refugee crises, internal displacements.
- *Nuclear Accidents:* Catastrophic events involving the release of radioactive materials from nuclear facilities. There have been 4 major nuclear disasters:
 1. Fukushima Daiichi nuclear disaster (2011)
 2. Chernobyl disaster (1986)
 3. Three Mile Island accident (1979)
 4. Kysthym Disaster (1957)
- *Overpopulation and Urban Congestion:* Problems arising from population growth and concentrated urban development. Examples include overcrowded cities, increased demand for resources.

CBRN Disaster

Chemical, Biological, Radiological, and Nuclear (CBRN) disasters refer to events or incidents involving the release or exposure of harmful substances that fall into one or more of these categories: chemical, biological, radiological, and nuclear. These disasters pose significant risks to human health, the environment, and infrastructure.

3. Levels of Disasters

The disaster management and its planning at various tiers must take into account the vulnerability of disaster-affected area, and the capacity of the authorities to deal with the situation. Using this approach, the High Power Committee on Disaster Management, in its report of 2001, categorized disaster situations into three 'levels': *L1*, *L2*, and *L3*. The period of normalcy, *L0*, should be utilized for disaster risk reduction.

Level-L1: The level of disaster that can be managed within the capabilities and resources at the District level. However, the state authorities will remain in readiness to provide assistance if needed.

Level-L2: This signifies the disaster situations that require assistance and active mobilization of resources at the state level and deployment of state level agencies for disaster management. The central agencies must remain vigilant for immediate deployment if required by the state.

Level-L3: This corresponds to a nearly catastrophic situation or a very large-scale disaster that overwhelms the State and District authorities.

The categorization of disaster situations into levels L0 to L3 finds no mention in DM Act 2005. Further, the DM Act does not have any provision for notifying any disaster as a 'national calamity' or a 'national disaster'.

4. Disaster Management Framework

At national level, the overall coordination of disaster management vests with the Ministry of Home Affairs (MHA). The Cabinet Committee on Security (CCS) and the National Crisis Management Committee (NCMC) are the key committees involved in the top-level decision-making concerning disaster management. The National Disaster Management Authority, NDMA is the lead agency responsible for the preparation Disaster Management (DM) plans and the execution of Disaster Management (DM) functions at the national level.

In most cases, State governments carries out disaster management with the Central Government playing a supporting role. The central agencies participates only on the request from the State Government. Within each State, there is a separate institutional framework for disaster management at the state-level.

The Disaster Management Act of 2005 provides for the setting up of NDMA at national level, and, the SDMA at the state level. The role, composition and the role of the key decision making bodies for disaster management at national-level are described below:

1. Cabinet Committee on Security (CCS)

Composition: Prime Minister, Minister of Defence, Minister of Finance, Minister of Home Affairs, and Minister of External Affairs

Role of this Committee is given below:

- Evaluation from a national security perspective, if an incident has potentially security implications.
- Oversee all aspects of preparedness, mitigation and management of Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and of disasters with security implications.
- Review risks of CBRN emergencies from time to time, giving directions for measures considered necessary for disaster prevention, mitigation, preparedness and effective response.

2. National Crisis Management Committee (NCMC)

Composition: Cabinet Secretary (Chairperson), Secretaries of Ministries /Departments with specific DM responsibilities

Role of this Committee is given below:

- Oversee the Command, Control and Coordination of the disaster response.
- Give direction to the Crisis Management Group as deemed necessary.
- Give direction for specific actions to face crises.

3. National Disaster Management Authority (NDMA)

Composition: Prime Minister (Chairperson), Members (not exceeding 9, nominated by the Chairperson)

Role of NDMA are given below.

- Lay down policies, plans and guidelines for disaster management.
- Coordinate their enforcement and implementation throughout the country.
- Approve the NDMP and the DM plans of the respective Ministries and Departments of Government of India.
- Lay down guidelines for disaster management to be followed by the different Central Ministries, Departments and the State Governments.

4. National Executive Committee (NEC)

Composition: Union Home Secretary (Chairperson), Secretaries in Ministries/ Departments.

Role of this Committee is given below:

- To assist the NDMA in the discharge of its functions.
- Preparation of the National Plan.
- Coordinate and monitor the implementation of the National Policy.
- Monitor the implementation of the National Plan and the plans prepared by the Ministries or Departments of the Government of India.
- Direct any department or agency of the Govt. to make available to the NDMA or SDMAs such men, material or resources as are available with it for the purpose of emergency response, rescue and relief.
- Ensure compliance of the directions issued by the Central Government
- Coordinate response in the event of any threatening disaster situation or disaster.

- Direct the relevant Ministries / Departments of the GoI, the State Governments and the SDMAs regarding measures to be taken in response to any threatening disaster situation or disaster.
- Coordinate with relevant Central Ministries/Departments / Agencies that are expected to assist to the affected State as per Standard Operating Procedures (SOPs).

5. National Disaster Response Force (NDRF)

Composition: Specially trained force headed by a Director General Structured like para military forces for rapid deployment.

Key Role of NDRF is given below.

- Provide assistance to the relevant State Government/District Administration in the event of an imminent hazard event or in its aftermath.

6. National Institute of Disaster Management (NIDM)

Composition: Union Home Minister; Vice Chairman, NDMA; Members including Secretaries of various nodal Ministries and Departments.

Key Roles of NIDM are given below.

- Human resource development and capacity building for disaster management within the broad policies and guidelines laid down by the NDMA.
- Design, develop and implement training programmes.
- Undertake research.
- Formulate and implement a comprehensive human resource development plan.
- Provide assistance in national policy formulation; assist other research and training institutes, state governments and other organizations for successfully discharging their responsibilities.
- Develop educational materials for dissemination.
- Promote awareness generation.

During Coronavirus crisis, the Disaster Management Act, 2005 (DM Act), was invoked by the Central government to impose a blanket lockdown to ensure "consistency in the application and implementation of various measures across the country". The CoVID-19 was declared as a "notified disaster" allowing the central government wide powers by laying down policies, plans and guidelines for disaster management to ensure a timely and effective response to the disaster. The Section 72 of the DMA, 2005, provides that the provisions of the Act, will have an overriding effect on all other laws, to the extent that they are inconsistent.

1. Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R (**UGC NE 2022- Evening shift**)

Assertion A: Lockdown in 2020 in India was imposed under the Disaster Management Act

Reason R: COVID 19 is the first pan-India biological disaster being handled under the Disaster Management Act

A is true but R is false

Both A and R are true but R is NOT the correct explanation of A

A is false but R is true

Both A and R are true and R is the correct explanation of A

Check

Question: 1 of 2 questions

4. Disaster Management Framework

National Disaster Management Authority (NDMA)

The National Disaster Management Authority (NDMA), headed by the Prime Minister of India, is the apex body for Disaster Management in India. Setting up of NDMA and the creation of an enabling environment for institutional mechanisms at the State and District levels is mandated by the Disaster Management Act, 2005. NDMA is mandated to lay down the policies, plans and guidelines for Disaster Management. India envisions the development of an ethos of Prevention, Mitigation, Preparedness and Response. It is functioned under the aegis of Ministry of Home Affairs (MHA).

Functions and Responsibilities

NDMA, as the apex body, is mandated to lay down the policies, plans and guidelines for Disaster Management to ensure timely and effective response to disasters. Towards this, it has the following responsibilities:

- Lay down policies on disaster management.
- Approve the National Plan.
- Approve plans prepared by the Ministries or Departments of the Government of India in accordance with the National Plan.
- Lay down guidelines to be followed by the State Authorities in drawing up the State Plan.
- Lay down guidelines to be followed by the different Ministries or Departments of the Government of India for the Purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects.
- Coordinate the enforcement and implementation of the policy and plans for disaster management.
- Recommend provision of funds for the purpose of mitigation.
- Provide such support to other countries affected by major disasters as may be determined by the Central Government.
- Take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with threatening disaster situations or disasters as it may consider necessary.
- Lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

National Institute of Disaster Management (NIDM)

In accordance with the Disaster Management Act 2005, the National Institute of Disaster Management (NIDM) was constituted under an Act of Parliament with a vision to play the role of a premier institute for capacity development in India and the region. NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation, and policy advocacy in the field of disaster management. NIDM provides technical support to the state governments through the Disaster Management Centres (DMCs) in the Administrative Training Institutes (ATIs) of the States and Union Territories.

National Disaster Response Force (NDRF)

The NDRF has been constituted as per the DM Act 2005 as a specialist response force that can be deployed in a threatening disaster situation or disaster. As per the DM Act, the general superintendence, direction and control of the NDRF shall be vested and exercised by the NDMA. The command and supervision of the NDRF shall vest with the Director General appointed by the Government of India.

4. Disaster Management Framework

As per the DM Act of 2005, each state in India shall have its own institutional framework for disaster management. Among other things, the DM Act, mandates that each State Government shall take necessary steps for the preparation of state DM plans, integration of measures for prevention of disasters or mitigation into state development plans, allocation of funds. The DM Act mandates the setting of a State Disaster Management Authority SDMA with the Chief Minister as the *ex officio* Chairperson. The State Government shall constitute a State Executive Committee (SEC) to assist the SDMA in the performance of its functions. The SEC will be headed by the Chief Secretary to the State Government. The SEC will coordinate and monitor the implementation of the National Policy, the National Plan, and the State Plan. The SEC will also provide information to the NDMA relating to different aspects of Disaster Management.

At the district level, District Disaster Management Authority (DDMA), the District Collector or District Magistrate or the Deputy Commissioner, as applicable, will be responsible for overall coordination of the disaster management efforts and planning. Detailed District Management Plan DMP will be developed.

5. National Disaster Management Plan

The National Disaster Management Plan (NDMP) provides a framework and direction to the government agencies for all phases of disaster management cycle. The NDMP is a "dynamic document" in the sense that it will be periodically improved keeping up with the global best practices and knowledge base in disaster management. It is in accordance with the provisions of the Disaster Management Act 2005, the guidance given in the National Policy on Disaster Management 2009 (NPDM), and the established national practices. Relevant agencies – central or state – will carry out disaster management activities in different phases in the disaster-affected areas depending on the type and scale of disaster.

The National Disaster Management Plan (NDMP) was released in year 2016 and updated in 2019.

The Plan has also incorporated a Chapter on Strengthening Disaster Risk Governance. The generalized responsibility matrix given in this section summarizes the themes for strengthening Disaster Risk Governance and specifies agencies at the Centre and State with their respective roles. The matrix has six thematic areas in which Central and State Governments have to take actions to strengthen disaster risk governance:

1. Mainstream and integrate DRR and Institutional Strengthening
2. Capacity Development
3. Promote Participatory Approaches
4. Work with Elected Representatives
5. Grievance Redress Mechanism
6. Promote Quality Standards, Certifications, and Awards for Disaster Risk Management

The NDMP has been aligned broadly with the goals and priorities set out in the Sendai Framework for Disaster Risk Reduction. For each hazard, the approach used in the national plan incorporates the 4 priorities enunciated in the Sendai Framework into the planning framework for Disaster Risk Reduction under the 5 Thematic Areas for Actions.

Sendai Framework

The Sendai Framework for Disaster Risk Reduction 2015-2030 is a global initiative that outlines a comprehensive approach to reducing the risks and impacts of disasters. Adopted at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan, in March 2015, the framework represents a significant international commitment to building resilience and preventing the adverse effects of disasters. The Sendai Framework is the successor to the Hyogo Framework for Action (2005-2015) and sets the agenda for disaster risk reduction over a 15-year period, from 2015 to 2030.

The Sendai Framework notes that it is "urgent and critical to anticipate, plan for and reduce disaster risk" to cope with disaster. It requires the strengthening of disaster risk governance and coordination across various institutions and sectors. It requires the full and meaningful participation of relevant stakeholders at different levels. It is necessary to invest in the economic, social, health, cultural and educational resilience at all levels. It requires investments in research and the use of technology to enhance multi-hazard Early Warning Systems (EWS), preparedness, response, recovery, rehabilitation, and reconstruction.

The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines 7 clear targets and 4 priorities for action to prevent new and reduce existing disaster risks:

The 4 priorities for action under the Sendai Framework are:

1. Understanding disaster risk
2. Strengthening disaster risk governance to manage disaster risk
3. Investing in disaster risk reduction for resilience
4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction

India is a signatory to the Sendai Framework for a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders. It aims for the "substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries."

1. India's disaster management plan is based on (**UGC NET 1st Oct 2022- Morning shift**)

- Rio summit
- Sendai framework
- Kyoto protocol
- Montreal protocol

Check

Question: 1 of 2 questions

5. National Disaster Management Plan

The guiding principles of Sendai Framework states that disaster risk reduction requires responsibilities to be shared by different divisions of governments and various agencies. The effectiveness in disaster risk reduction will depend on coordination mechanisms within and across sectors and with relevant stakeholders at all levels.

For each hazard, the approach used in the national plan incorporates the principles enunciated in the Sendai Framework into the planning framework for Disaster Risk Reduction under the 5 thematic areas for action:

1. Understanding Risk

This thematic area for action focuses on understanding disaster risk, the Priority-1 in the Sendai Framework integrates into it numerous actions needed for strengthening disaster resilience. The major themes for action are:

- Observation Networks, Information Systems, Research, Forecasting,
- Zoning / Mapping,
- Monitoring and Warning Systems,
- Hazard Risk and Vulnerability Assessment (HRVA), and
- Dissemination of Warnings, Data, and Information.

2. Inter-Agency Coordination

Inter-agency coordination is a key component of strengthening the disaster risk governance - Priority-2 of the Sendai Framework. The major themes for action required for improving the top-level interagency coordination are:

- Overall disaster governance
- Response
- Providing warnings, information, and data and
- Non-structural measures.

3. Investing in DRR – Structural Measures

Undertaking necessary structural measures is one of the major thematic areas for action for disaster risk reduction and enhancing resilience. These consist of various physical infrastructure and facilities required to help communities cope with disasters. The implementation of these measures is essential to enhance disaster preparedness, a component of Priority-4 of the Sendai Framework. It is also an important component of investing in disaster risk reduction for resilience, which is Priority-3 of Sendai Framework.

4. Investing in DRR – Non-Structural Measures

Sets of appropriate laws, mechanisms, and techno-legal regimes are crucial components in strengthening the disaster risk governance to manage disaster risk, which is Priority-2 of the Sendai Framework. These non-structural measures comprising of laws, norms, rules, guidelines, and techno-legal regime (e.g., building codes) framework and empowers the authorities to mainstream disaster risk reduction and disaster resilience into development activities. The central and state governments will have to set up necessary institutional support for enforcement, monitoring, and compliance.

5. Capacity Development

Capacity development is a theme in all the thematic areas for action. The Sendai Priority-2 (Strengthening DRR governance to manage DR) and Priority-3 (Investing in DRR for resilience) are central to capacity development. The capacity development includes training programs, curriculum development, large-scale awareness creation efforts, and carrying out regular mock drills and disaster response exercises. The capability to implement, enforce, and monitor various disaster mitigation measures has to be improved at all levels from the local to the higher levels of governance. It is also strengthening the DRR governance at all levels to better manage risk and to make the governance systems more responsive.

1. Which of the following areas are covered under planning framework for Disaster Risk Reduction?

- All of the above
- Understanding Risk
- Investing in DRR – Structural Measures
- Inter-Agency Coordination

Check

Question: 1 of 1 questions

6. Hazard Mitigation

The Disaster Management Act, 2005 and the National Policy, 2009 marks the institutionalization of paradigm shift in disaster management in India, from a relief-centric approach to one of proactive prevention, mitigation and preparedness. The Policy notes that while it is not possible to avoid natural hazards, adequate mitigation and disaster risk reduction measures can prevent the hazards becoming major disasters. Disaster risk arises when hazards interact with physical, social, economic and environmental vulnerabilities.

The National Policy suggests a multi-pronged approach for disaster risk reduction and mitigation consisting of the following:

- Integrating risk reduction measures into all development projects.
- Initiating mitigation projects in identified high priority areas through joint efforts of the Central and State Governments.
- Encouraging and assisting State level mitigation projects.
- Paying attention to indigenous knowledge on disaster and coping mechanisms.
- Giving due weightage to the protection of heritage structures.

The disaster risk reduction and mitigation plan integrates the global targets into the national efforts and seeks to strengthen significantly India's reliance to both natural and human-induced disasters.

The DM Act 2005 defines *Mitigation* as measures aimed at reducing the risk, impact, or effects of a disaster or threatening disaster situation. Goal of mitigation is to minimize risks from multiple hazards and the threats from individual hazards need not always occur in isolation.

6. Hazard Mitigation

The risk assessment process generally follows a basic 4 step risk assessment process, including hazard identification, exposure assessment, dose-response assessment, and risk characterization, as described below.

- *Step 1 - Hazard Identification:* Identify the hazards by finding out which contaminants may be harmful, determine their concentrations in the environment, describe the specific types of harm they can cause, and assess when and how these harms might affect people.
- *Step 2 - Exposure Assessment:* Assess the dose-response relationship by further understanding how the chemical's harmful properties manifest in people, focusing on the connection between the dose (amount) and the harmful response. This may involve using mathematical models and considering variations in response, such as differences in susceptibility among different age groups.
- *Step 3 - Dose-Response Assessment:* Evaluate exposure by specifying the population at risk, identifying how they might come into contact with the harmful agent, and estimating the amount, duration, and timing of their exposure.
- *Step 4 - Risk Characterization:* Characterize the risk by combining information from the first three steps to estimate the likelihood of harm occurring in exposed individuals. This step provides a qualitative or quantitative expression of the assessed risk, including a thorough discussion of the uncertainties associated with the risk estimates.

1. What is the correct sequence of steps in Risk assessment related to environmental hazards? (**UGC NET 22nd Evening Shift**)

- A. Risk characterization
B. Exposure assessment
C. Hazard Identification
D. Risk Management

C, B, A, D

A, C, B, D

C, A, B, D

B, C, D, A

Check

Question: 1 of 2 questions

7. Coalition for Disaster Resilient Infrastructure

In September 2019, the Prime Minister of India announced the launch of the Coalition for Disaster Resilient Infrastructure (CDRI). This happened at the UN Secretary General's Climate Action Summit in New York, USA. It is the Government of India's second major global initiative after the International Solar Alliance, and it demonstrates India's leadership in climate change and disaster resilience issues. The Secretariat is headquartered at New Delhi.

Coalition for Disaster Resilient Infrastructure (CDRI) is a global partnership of National Governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, academic and knowledge institutions that aims to promote the resilience of infrastructure systems to climate and disaster risks, thereby ensuring sustainable development. It aims to enhance the capacity of nations to minimize the impact of such disasters on infrastructure, ensuring swift recovery and sustainable development.

1. Passage 1- 01 Mar 2023 (M)

Read the following passage and answer the question given below: (UGC NET 01 Mar 2023 Morning)

Around the age of 2, children have a sense of intention, at least of their own intentions. They will announce, "I wanna peanut butter sandwich". As children develop a theory of mind, they also can understand that other people have intentions of their own. Older pre-schoolers who get along well with their peers can separate intentional from unintentional actions and react accordingly. For example, they will not get angry when another child accidentally knocks over their block tower. But aggressive children have more trouble assessing intention. They are likely to attack anyone who topples their tower, even accidentally. As children mature, they are more able to assess and consider the intentions of others. With a developing theory of mind, children are increasingly able to understand that other people have different feelings and experiences and therefore may have a different viewpoint or perspective. This perspective-taking ability develops over time until it is quite sophisticated in adults. Being able to understand how others might think and feel is important in fostering cooperation and moral development, reducing prejudice, resolving conflicts, and encouraging positive social behaviours in general. Some coaching in perspective taking from the teacher might help if children mistreat peers and the mistreatment is not part of a deeper emotional or behavioural disorder.

Children of which of the following ages would generally have the best perspective taking ability?

- 1.3 years
- 8 years
- 13 years
- 18 years

Check

Given below are two statements

Statement I: Aggressive children can assess intention of others with ease.

Statement II: Different persons may have different viewpoints.

In the light of the above statements, choose the most appropriate answer from the options given below.

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

3. Understanding how others feel is important in

- A. Developing empathy
- B. Reducing prejudice
- C. Conflict resolution
- D. Encouraging Selfishness
- E. Enhancing cooperation

Choose the most appropriate answer from the options given below:

A, B, C and D Only

A, B, C and E Only

B, C, D and E Only

A, B, D and E Only

Check

4. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Older pre-schoolers have better chances of getting along well with their peers as compared to young schoolers.

Reason R: Older pre-schoolers generally have a better understanding of the intentions of others.

In the light of the above statements, choose the most appropriate answer from the options given below.

Both A and R are correct and R is the correct explanation of A.

Both A and R are correct but R is NOT the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

5. Given below are two statements:

Statement I: A 2 years old child is likely to have a better understanding of his own intentions than those of others.

Statement II: It is always helpful to coach a child in perspective-taking if the child has the habit of mistreating others of some behavioural disorder.

In the light of the above statements, choose the most appropriate answer from the options given below.

Both Statement I and Statement II are correct.

Both Statement I and Statement II are incorrect.

Statement I is correct but Statement II is incorrect.

Statement I is incorrect but Statement II is correct.

Check

2. Passage 2- 01 Mar 2023 (E)

Read the following passage and answer the question given below: (UGC NET 01 Mar 2023 Evening)

The process of the imperialist conquest of Asia and Africa was accompanied by intense rivalries and conflicts among the European imperialist powers. The competing claims over colonies often created conditions of war. However, most of these conflicts were resolved in the conference rooms of Europe and wars were generally avoided. The European powers generally settled their disputed claims over territory on the basis of quid pro quo or 'something for something', by giving away something in exchange for something else. For example, in 1904, after a long period of conflicting claims, which had brought them almost to the point of war, Britain and France entered into a secret agreement whereby Britain was given a 'free hand' in Egypt, while France was given uninterrupted right of domination over Morocco. When Germany came to know about it, she demanded that France relinquish her claim to Morocco. A series of international crises followed, bringing Europe to the brink of war. The Moroccan issue was finally settled in 1911 when France agreed to give a portion of French Congo to Germany and Germany relinquished her claim over Morocco. Both in creating these crises and in resolving them, the people of French Congo or Morocco, whose territories were being bargained, had no say.

1. Which of the following countries was allowed to take control of Egypt?

- Britain
- France
- Germany
- Spain

Check

2. Given below are two statements. In light of these statements, choose the most appropriate answer from the options below:

Statement I: Competing claims over African colonies were generally settled through war among the European powers.
Statement II: France was in conflict only with Britain over Morocco.

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

3. Which of the following countries was allowed to have colony in Morocco?

- Britain
- France
- Germany
- Spain

Check

4. Given below are two statements:

Statement I: France allowed Germany to exercise full control over the French Congo.

Statement II: France went to war with Britain in 1904.

In light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

5. Which among the following European powers were involved in tussle over Morocco?

- Britain
- France
- Germany
- Spain

Check

3. Passage 3- 02 Mar 2023 (M)

Read the following passage and answer the question given below: (UGC NET 02 Mar 2023 Morning)

Indian rulers, particularly the Pala and Sena rulers of Bengal, and the Pallava and Chola rulers of south India, tried to encourage the trade with China.

The Chola ruler, Rajendra I, sent a naval expedition against Malaya and the neighbouring countries to overcome their interference in the trade with China.

There is evidence to show that there were many shipyards which were located on the west coast, including Gujarat. Thus, growth of India's foreign trade in the area was based on a strong maritime tradition, including ship building, and the skill and enterprise of its traders. The Chinese trade was very favourable to the countries engaged in it, so much so that in the thirteenth century, the Chinese government tried to restrict the export of gold and silver from China. Indian ships gradually gave way to the Arabs and the Chinese ships which were bigger and faster. We are told that the Chinese ships were several storeys high and carried 600 passengers apart from 400 soldiers. An important factor in the growth of the Chinese ships was the use of the mariner's compass-an invention which later travelled from China to the West.

1. The naval expedition against Malaya was sent by a

- Pala ruler
- Sena ruler
- Pallava ruler
- Chola ruler

Check

2. Given below are two statements. In light of these statements, choose the most appropriate answer from the options below:

Statement I: Trade between India and China always occurred in the Chinese ships as these were always better than Indian Ships.

Statement II: Malaya was located in Kerala.

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

3. Which among the following factors played an important role in India's trade with China?

- A. Ship building in India
- B. Strong navy
- C. Skill and enterprise of the traders.

Choose the most appropriate answer from the options given below:

A and B only

B and C only

A and C only

A, B and C

Check

4. Indian rulers from which of the following regions tried to encourage trade with China?

- A. Bengal
- B. Gujarat
- C. South India

Choose the correct answer from the options given below:

A and B only

B and C only

A and C only

A, B and C

Check

5. Shipyards in India were located at

- A. Bengal
- B. Orissa
- C. South India
- D. Gujarat

Choose the most appropriate answer from the options given below:

A, B and C only

A and C only

A, C and D only

A, B, C and D

Check

4. Passage 4 02 Mar 2023 (E)

Read the following passage and answer questions: (UGC NET 02 Mar 2023 Evening)

The global financial crisis that began in 2008 hit Europe almost immediately with a major debt crisis. Borrowers in a number of Eurozone countries had built up large debts and appeared to be unable to service them.

The four principal Eurozone debtors were Greece, Ireland, Portugal and Spain. In Spain and Ireland, households had borrowed heavily to finance a major housing and construction boom. When housing prices collapsed, the two national governments started borrowing heavily from abroad to finance national bank bailouts and to stimulate their economies. Greece, however, had been running budget deficits ever since the creation of the Eurozone, with the government relying heavily on foreign borrowing to cover the shortfalls. Portugal was somewhere in between; both households and the government had been borrowing heavily. The difficulties of the Eurozone debtors were not just a problem for them, since major northern European financial institutions and investors were the ones that had made most of these loans. If the debtors defaulted, trillions of dollars in loans on the books of northern European banks, investors and pension funds would go bad. The weight of so many bad loans and investments endangered the very integrity of the financial systems of even the richest European countries, especially Germany and France. The sovereign debt crisis threatened both the sovereign debtors and their creditors- and, in fact, the entire European economy.

1. Which countries among the following had very high household borrowings?

- A. Portugal
- B. Ireland
- C. Greece
- D. Spain

Choose the most appropriate answer from the options given below:

- A, B and C Only
- B, C and D Only
- A,C and D Only
- A, B and D only

Check

2. Given below are two statements:

Statement I: The debt crisis did not affect the richest European countries.

Statement II: The debt crisis threatened only the debtors.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

3. Which countries among the following were the main Eurozone debtors in 2008?

- A. Germany
- B. Spain
- C. France
- C. Greece
- D. Portugal

Choose the most appropriate answer from the options given below:

A, B and C Only

B, C and D Only

B,D and E Only

A, B C D and E

Check

4. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: In 2008, Europe was quite susceptible to the global financial crisis.

Reason: The global financial crisis immediately led to a major debt crisis in Europe.

In the light of the above statements, choose the most appropriate answer from the options given below:

Both A and R are correct and R is the correct explanation of A.

Both A and R are correct and R is not the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

5. Failure on part of the debtors to pay loans would have risked

- A. Pension Funds
- B. Investors
- C. Northern European Banks

Choose the most appropriate answer from the options given below:

A and B Only

B and C Only

A and C only

A, B and C

Check

5. Passage 5- 03 Mar 2023 (M)

Read the following passage and answer the question: (UGC NET 03 Mar 2023 Morning)

Kant's claim that liberal states are pacific in their international relations with other liberal states was revived in the 1980s. In a much-cited article, Michael Doyle argued that liberal states have created a 'Separate peace'. According to Doyle, there are two elements to the Kantian legacy, restraint among liberal states and International imprudence' in relations with non-liberal states. Although the empirical evidence seems to support the democratic peace thesis, it is important to bear in mind the limitations of the argument. In the first instance, for the theory to be compelling, believers in the thesis need to provide an explanation as to why war has become unthinkable between liberal states. Kant had argued that if the decision to use force were taken by the people, rather than by the prince, then the frequency of conflicts would be drastically reduced. But, logically, this argument also implies a lower frequency of conflicts between liberal and non-liberal states, and this has proven to be contrary to the historical evidence. An alternative explanation for the democratic peace thesis might be that liberal states tend to be wealthy, and therefore have less to gain (and more to lose) by engaging in conflicts than poorer authoritarian states. Perhaps the most convincing explanation of all is the simple fact that liberal states tend to be in relations of amity with other liberal states.

1. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Historical evidence suggests that the frequency of conflicts between liberal and non-liberal states is low.
Reason R: In liberal states, the decision to go to war is taken by the people, rather than by the Monarch.
In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R are correct and R is the correct explanation of A.
- Both A and R are correct and R is NOT the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

2. Identify the inferences that you can draw after reading the passage.

- A. Frequency of conflicts among the liberal states is low.
- B. Frequency of conflicts between liberal and non-liberal states is low.
- C. Liberal states are generally rich.

Choose the correct answer from the options given below:

- A and B Only
- B and C Only
- A and C Only
- A, B and C

Check

3. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Liberal states have very little to gain and much to lose by going to war.

Reason R: Liberal States are generally wealthy.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R are correct and R is the correct explanation of A.
- Both A and R are correct and R is NOT the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

4. What can be said about the liberal states after reading the passage?

- A. Liberal states tend to maintain peace with all other states.
- B. Liberal states tend to maintain peace with all other liberal states.
- C. Liberal states tend to be wealthy.
- D. Decision to go to war is taken democratically in Liberal states.

Choose the correct answer from the options given below:

- A, B and C Only
- B, C and D Only
- A, C and D Only
- A, B, C and D

Check

5. Given below are two statements:

Statement I: There exists international wisdom when it comes to relations with non-liberal states.

Statement II: Liberal states tend to maintain enmity with other liberal states.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

6. Passage 6- 03 Mar 2023 (E)

Read the below passage and answer the following questions: (UGC NET 03 Mar 2023 Evening)

The momentum of change across India is evidenced in the enthusiasm among India's youth. The growth of civil society organisations, aspirations of youth legislators, and participation of activists are grounded in the market. The momentum of change across India thus is presented as the politics of hope that is brought about by the power of the market. We must also note the articulation of the sense of possibility of hope that has been made possible by the market such that everyday Indians can leave their village in the hope for something better waiting for them in their future. The narrative of continual progress and belief in the future thus are intertwined with the individual freedoms that have been brought about by the market. Belief in the future made possible through self-help and participation in the market is synonymous with new opportunities. This sense of possibilities then is juxtaposed in the backdrop of welfare services and public support, which are portrayed as being out of sync with the new imagination of a new empowered India. The story of an India is that of liberated aspirations made possible by economic reforms. This is further improved by the state based politics of public welfare and public support. The promise of India in its youth is marked by liberalisation and market reforms. The miracle of market holds key to the future of India.

1. The change witnessed in India now is due to

Social grounding

Political interference

The market momentum

Youth migration

Check

2. The change taking place in India is described as

Activism

Articulation

Politics of marketing

Politics of hope

Check

3. The youth's belief in the future is propelled by

Disrupted progress

Self-help

Restricted freedom

Unsynchronized imagination

Check

4. Which of the following had strengthened the people's belief in the future?

- Public welfare policies
- Narratives of backwardness
- Limited opportunities
- Absence of public support

Check

5. For a new empowered India, the passage has highlighted the importance of

- Controlling the market power
- Political reforms
- Urbanisation
- Economic reforms and liberalisation

Check

7. Passage 7- 04 Mar 2023 (M)

Read the following passage and answer the question. (UGC NET 04 Mar 2023 Morning)

It was in this atmosphere of intense antagonism and hostility that Gokhale introduced his Elementary Education Bill in 1910. He called it 'a small humble attempt to suggest the first steps of a journey, which is bound to prove long and tedious, but which must be performed, if the mass of our people are to emerge from their present condition. Gokhale argued: Free and compulsory education is the first remedy of all the remedies to be applied...without compulsion the educational developments in the last 60 years have been hopelessly slow. The only way that the world has discovered to secure universal education in a country has been by making it compulsory and free. Compulsion would operate harshly on the poorer classes of the community if it is not made free.

He suggested that only those students whose family income was 25 rupees and above per month should pay fees; for the rest, education was to be free. Out of the total expenditure required for it, two-thirds should be borne by the state and one-third by the local bodies. He suggested imposing an additional 8-anna tax on salt on the grounds that 'my countrymen should eat less salt than that their children should continue to grow up in ignorance and darkness'.

1. According to Gokhale, what percentage of the total expenditure on education should be borne by the state?

- ≈ 25%
- ≈ 33%
- ≈ 66%
- ≈ 75%

Check

2. Given below are two statements:

Statement I: Gokhale believed that education was necessary for the Indian masses to be liberated from their miserable condition.

Statement II: Gokhale faced little resistance in the introduction of his bill on elementary education.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

3. Which if the following can be inferred from the passage?
- A. The growth of education in India was very slow prior to Gokhale.
 - B. There was a need to make education compulsory for all according to Gokhale.
 - C. Gokhale believed that achieving education for all Indians was a distant dream.
 - D. Gokhale suggested that majority of expenditure for education should be met by local bodies.

In the light of the above statements, choose the correct answer from the options given below:

A, B and C Only

B, C and D Only

A, B and D Only

A, C and D Only

Check

4. Given below are two statements:

- Statement I: Gokhale believed that education should be made free for the poor people.
Statement II: Gokhale suggested that an additional tax of 8-anna should be imposed on salt.

In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are correct.

Both Statement I and Statement II are incorrect.

Statement I is correct but Statement II is incorrect.

Statement I is incorrect but Statement II is correct.

Check

5. Given below are two statements: One is labelled as Assertion A and other is labelled as Reason R.

Assertion A: Gokhale was not in favour of free education for the poor

Reason R: He suggested that those students whose family income was Rs. 25 per month or more, should pay the fees.

In the light of the above statements, choose the correct answer from the options given below:

Both A and R are correct and R is the correct explanation of A.

Both A and R are correct but R is NOT the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

8. Passage 8- 04 Mar 2023 (E)

Read the following passage and answer the following questions that follows: (UGC NET 04 Mar 2023 Evening)

A problem with international trade is that it externalizes costs on a grand scale. Tropical hardwood products can be sold extremely cheaply in the United States - as lumber, Plywood, shipping pallets, and so on. The environmental costs of producing those hardwood products occur far from the consumer who buys a piece of cheap Brazilian plywood. Making matters worse, the environmental costs of the plywood are usually exported to places where there are few legal controls on pollution and resource extraction. A factory in the United States, for example, is legally bound to minimize its production of air and water pollution. Pollution control can be expensive, and internalizing this cost makes a factory less profitable. A similar factory in Mexico might have far less responsibility for pollution control, making it cheaper, at least in the short term, to produce goods there than in the United States. Ongoing protests in the United States and elsewhere around the world against the World Trade Organization (WHO) and other forces of globalization have been largely about such exporting and externalizing of environmental and social costs of production.

Another criticism of international trade is that the international banking systems that finance it are set up by and for the wealthy countries.

The WTO and GATT are both made up of relationships and agreements between corporations in a few very wealthy countries. Representatives of less powerful countries often charge that these agreements trap poorer regions into the role of suppliers of natural resources - timber, mineral ores, fruit, and cheap labour. These countries are forced to mine their natural capital for only small returns in wealth.

1. According to the passage, international trade

- A. stimulates economies
 - B. externalizes costs
 - C. is controlled by wealthy countries
- Choose the correct answer from the options given below:

A and B Only

B and C Only

A and C Only

A, B and C

Check

2. Given below are two statements: One is labelled as Assertion A and other is labelled as Reason R.
Assertion A: Tropical hardwood products can be sold at very cheap rates in the United States.
Reason R: Factories in the United States are very efficient in making hardwood products.

In the light of the above statements, choose the correct answer from the options given below:

Both A and R are correct and R is the correct explanation of A.

Both A and R are correct but R is NOT the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

3. Given below are two statements:

Statement I: Representatives of powerful countries claim that international trade agreements help the poor region their products.

Statement II: The poor countries sell their natural resources for small gains.

In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

Check

4. Poor countries are suppliers of

- A. Timber
- B. Mineral Ores
- C. Machines
- D. Fruit
- E. Cheap Labour

Choose the correct answer from the options given below:

A, B, C and D only

B, C, D and E only

A, C, D and E only

A, B, D and E only

Check

5. A consumer in the United States buys a cheap Brazilian hardwood product manufactured in Mexico. The enviro costs of the product would occur at

- A. Brazil
- B. Mexico
- C. The United States

Choose the correct answer from the options given below:

A and B only

B and C only

A and C only

A, B and C

Check

9. Passage 9- 05 Mar 2023 (M)

Read the passage and answer the question given below: (UGC NET 05 Mar 2023 Morning)

Aware of the high stakes involved in seizing control over the Indus for navigation, the British persuaded two Sindh amirs, Rustam Khan, the Amir of Khanpur and Murad Ali of Hyderabad, to enter into a one-sided treaty and as proxies to throw the Indus open to the British Military and political penetration. Under the treaty, signed reluctantly by the Sindh amirs, the British obtained the right to take the final decision regarding taxation duties on goods passing through the Indus to the Arabian Sea. This was a variation of a gun-boat diplomacy with which the advancing British seized the veto in their hands to control the entire trade flow from Central Asia to Sindh and thereby the right to manipulate the economies of the regions and the states, including that of Ranjit Singh whose removal was not on their agenda.

The next step was to coerce Ranjit Singh to sign the treaty, opening Sutlej to commerce as well. The British agent, Captain, Wade, told the Maharaja that the expansion of trade in his (the Maharaja's) dominions would result only after signing the treaty. But the British agencies had disrupted the economy of the Sikh state by imposing a heavy toll of Rs. 570 on the boats carrying large loads. This included the pashmina shawl output from 20,000 looms that were operating in Kashmir. The shawls were exported mainly to the European market, especially France, where they posed stiff competition to woollen manufacturers from Britain.

1. Given below are two statements:

Statement I: The Pashmina Shawls were quite popular in Europe.

Statement II: The British made it easy for Kashmiri manufacturers to export the Pashmina Shawls to Europe.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct
- Both Statement I and Statement II are incorrect
- Statement I is correct but Statement II is incorrect
- Statement I is incorrect but Statement II is correct

Check

2. Given below are two statements: One is labelled as Assertion A and other is labelled as Reason R.

Assertion A: The British wanted Ranjit Singh to sign the treaty.

Reason R: The British wanted to control the trade through the Indus.

In the light of the above statements, choose the correct answer from the options given below:

- Both A and R are correct and R is the correct explanation of A.
- Both A and R are correct but R is NOT the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

3. Who were persuaded by the British to enter into a treaty with them?

- A. Rustam Khan
- B. Murad Ali
- C. Ranjit Singh

Choose the most appropriate answer from the options given below:

- A and B only
- B and C only
- A and C only
- A, B and C

 Check

4. Given below are two statements:

Statement I: The Sindh amirs were quite pleased and willing to sign the treaty with the British.
Statement II: Controlling the navigation through the Indus was high on the British agenda.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

 Check

5. Given below are two statements: One is labelled as Assertion A and other is labelled as Reason R.

Assertion A: The British wanted to control the navigation routes through the rivers.

Reason R: Rivers were used for trading goods and the British found it lucrative to make profit by controlling the trade.

In the light of the above statements, choose the correct answer from the options given below:

- Both A and R are correct and R is the correct explanation of A.
- Both A and R are correct but R is NOT the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

 Check

10. Passage 10- 05 Mar 2023 (E)

Read the passage and answer the questions that follow: (UGC NET 05 Mar 2023 Evening)

As Martin tells the story, Dius Tadong knows a great deal about the tropical forest in his country, Malaysia. After working for several years all over his native island, Borneo, for the Sabah State Forest Authority, he decided to return to his home village, part of the Dusun community. The Dusun are an indigenous group who still depend to a large extent on what nature provides. They live on the edge of the Kinabalu National Park, a large protected area of 753 square kilometers. Tadong works with the villagers to collect and list plants. The project aims at providing better knowledge and use of plant species in protected regions by providing training and assistance.

"In Kinabalu Park.", Martin writes, the first stage consists of drawing up an inventory on rich flora, believed to include about 4,000 species, starting with plants that are useful to humanity. Studies of medicinal, edible and decorative plants are planned. Dius Tadong continues to cultivate the land, just as the other five plant collectors still work in their villages. They concentrate on palm trees, including those used to make cane, which are of crucial importance to the local population. The trees are used as food and in traditional medicine, as roofing material, to make rope, and in arts and crafts.

"Similar projects are underway elsewhere - in Bolivia, Cameroon, Mexico, Uganda and the Caribbean for instance - in the hope of building ecological awareness based on ancestral knowledge. These projects may turn out to be more rewarding than previous efforts because they are being conducted in cooperation with the local people who know the forest intimately."

1. How many plant collectors are working in the project referred to in the first two paragraphs of the passage?

- 6
- 5
- 4
- 7

Check

2. Given below are two statements:

Statement I: Tadong, a native of Borneo Island, is an outsider in the Dusun community.
Statement II: Tadong currently works with the Sabah State Authority.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

3. Given below are two statements: One is labelled as Assertion A and other is labelled as Reason R.

Assertion A: Earlier projects in the region were not very fruitful in achieving what they were aimed at.
Reason R: Earlier projects were conducted without cooperation and support of the local people.

In the light of the above statements, choose the correct answer from the options given below:

- Both A and R are correct and R is the correct explanation of A.
- Both A and R are correct but R is NOT the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

4. The project plans to study plants which are useful for

- A. Timber
- B. Medicine
- C. Decoration
- D. Food

Choose the correct answer from the options given below:

- A, B and C only
- A, C and D only
- A, B and D only
- B, C and D only

Check

5. Given below are two statements:

Statement I: Dusun community lives inside the Kinabalu National Park.

Statement II: The project plans to fulfil its aim by utilizing the traditional knowledge of local people.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

11. Passage 11- 06 Mar 2023 (M)

Read the following passage and answer the question given below: (UGC NET 06 Mar 2023 Morning)

During about a hundred years after the thirteen English colonies on the east coast of 'North America had won their independence from England and emerged as the United States of America, that country had attained its present territorial proportions. The westward territorial expansion of the United States took place at the cost of the American Indian Tribes which inhabited those areas. The American Indians resisted these encroachments but by 1890 this resistance finally ended in a massacre at a place called Wounded Knee in South Dakota. USA also purchased vast territories of Louisiana and Alaska from France and Russia, respectively and Seized Texas and California from Mexico after a war with that country. Between 1861 and 1865, there was a civil war when the southern States of USA, which were primarily agricultural with plantations worked by slave labour, seceded from the Union. As a result of the defeat of the southern States in the civil war, the Union was preserved and slavery was abolished.

Within about three decades after the end of the Civil War, USA had become the foremost industrial power in the world. By the end of the nineteenth century, she was producing about one-third of the total production of iron and steel in the world. In almost every branch of industry, she outstripped every other country in the world.

1. USA purchased vast territories from

- A. France
- B. England
- C. Mexico
- D. Russia

Choose the most appropriate answer from the options given below:

- A and B only
- A and C only
- B and C only
- A and D only

Check

2. USA became the topmost industrial power of the world by

- The end of eighteenth century
- The beginning of the nineteenth century
- The middle of the nineteenth century
- The end of the nineteenth century

Check

3. Given below are two statements:

Statement I: The territories near the West coast of North America became part of USA much later than those near Coast.

Statement II: USA gained independence from England in the nineteenth century.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

4. The resistance of American Indians against the territorial expansion of USA ended

- About 50 years after USA came into existence.
- About 25 to 30 years after the Civil war in USA.
- About 25 to 30 years before the Civil war in USA.
- About 25 to 30 years after USA came into existence.

Check

5. Given below are two statements:

Statement I: The southern states were successful in rejoining from the USA after the civil war.

Statement II: Abolition of slavery was one of the outcomes of civil war in USA.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

12. Passage 12 - 06 Mar 2023 (E)

Read the passage and answer the questions that follow (UGC NET 06 Mar 2023 Evening)

With the decline of the Roman Empire, China had become a main focus of trade in the Indian Ocean. The Chinese consumed enormous quantities of spices which were imported from South-East Asia and India. They also imported ivory the best of which came from Africa, and glassware which came from West Asia. To these were added medicinal herbs, lac, incense, and all types of rare things. Generally products from Africa and West Asia did not go beyond the Malabar in South India. Nor did Chinese ships go beyond the Moluccas in South-East Asia. Thus, both India and South-East Asia were important staging centres for trade between China and the countries of West Asia and Africa. Indian traders- especially the Tamil and Kalinga (from modern Orissa and Bengal)- played an active role in this trade, along with Persians, and later the Arabs. Much of the trade to China was carried in Indian ships, the teak-wood of Malabar, Bengal and Burma providing the base of a strong tradition of ship building. The weather conditions were also such that it was not possible for a ship to sail straight from the Middle-East to China. The ships would have to wait for a long period in ports in between for favourable winds which blow from the west to the east before the monsoon and from east to west after the monsoon.

1. The wood for the Indian ship building industry came mainly from

- A. Middle East
- B. Burma
- C. West-Asia
- D. Bengal
- E. Malabar

Choose the correct answer from the options given below:

- A, B and C only
- B, C and D only
- B, D and E only
- C, D and E only

Check

2. The best ivory products came from

- India
- Africa
- Persia
- South East Asia

Check

3. Given below are two statements:

Statement I: Chinese ships travelled all the way from China to the Middle-East and West Asia. Statement II: China came to Malabar Coast for trade.

In light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

4. Given below are two statements:

Statement I: Indian traders played an important role in China's trade with West Asia and Africa. Statement II: Before monsoons, favourable winds blow from east to west.

In light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are correct.
- Both Statement I and Statement II are incorrect.
- Statement I is correct but Statement II is incorrect.
- Statement I is incorrect but Statement II is correct.

Check

5. The Chinese imported spices mainly from

- A. Africa
- B. India
- C. West-Asia
- D. South-East Asia

Choose the correct answer from the options given below:

- A and B only
- B and C only
- C and D only
- B and D only

Check

13. Passage 13 - 11 Mar 2023 (M)

Read the following passage and answer questions (UGC NET 11 Mar 2023 Morning)

Status quo is easily exploited. One of the causes of status quo bias is a lack of attention. Many people adopt what we call the - Yeah, whatever, heuristic. A good illustration is the carry over effect in television viewing. Network executives spend a lot of time working on scheduling because they know that a viewer who starts the evening on a particular network channel tends to stay there. Since remote controls have been pervasive in this country for decades, the actual 'switching' costs in this context are literally one thumb press. But when one show ends and the next one comes on, a surprisingly high number of viewers, implicitly say 'Yeah, whatever' and keep watching. Nor is the reader of a particular magazine the only victim of automatic renewal of magazine subscription. Those who are in charge of circulation know that when renewal is automatic and when people have to make a phone call to cancel, the likelihood of renewal is much higher than it is when people have to indicate that they actually want to continue to receive the magazine. The combination of loss aversion with mindless choosing implies that if an opinion is designated as the 'default', it will attract a large market share. In many contexts defaults have some extra nudging power because consumers may feel, rightly or wrongly, that default options come with an implicit endorsement from the default setter. be it the employer, government, or TV scheduler. For this and other reasons, setting the best possible defaults will be a theme to explore by scholars.

1. One of the causes for status quo bias is

- Psychological disability
- Market pressure
- Ego of Individuals
- Attention deficit

Check

2. The cost of switching TV remote control is

- Enormous
- Time-tested
- Mere thumb press
- Moderate

Check

3. The carry-over effect in relation to television means

- Stop watching it
- Continue watching it
- Switch over to another medium
- Complain to network executives

Check

4. Default options become powerful when

- People reject offers.
- People do not know what to select.
- People want to switch default option.
- Default setters endorse them.

Check

5. The passage is a deconstruction of

- The status quo bias and the issue of default options.
- The psychological exploitation of network executives.
- Careful selection of magazines.
- Default options not attracting the market share.

Check

14. Passage 14 - 11 Mar 2023 (E)

Read the following passage and answer the question: (UGC NET 11 Mar 2023 Evening)

Social media platforms have significant advantage over news publishers because of their size and superior information about users. Driven by the need to generate the maximum possible returns for investors, they do not shy away from leveraging this advantage when negotiating commercial agreements.

While news publishers in many countries come together as a consortium to further their collective interests, the rivalry among news publishers prevents them from presenting a united front to bargain for their collective interests. As a result, in individual negotiations with social media platforms, the revenue share, if they ever get any, is trivial compared to the total money made by social media platforms.

Local news publishers, often very small, suffer disproportionately, to the extent that many have gone bankrupt in the last few years. Those who have survived have become more content-producing vendors. They exist to feed the social media monster, which decides which article will appear in which readers feed to maximize advertising revenues. Journalistic responsibility to provide citizens with the information they need to make important decisions about their lives, communities and governments is seldom a consideration.

1. Given below are two statements:

Statement I: News publishers have better information about their users as compared to social media platforms.
Statement II: Social media platforms are generally very particular in presenting correct information to the citizens.
In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

2. Identify the correct statements from those given below:

- A. Social media platforms have impacted the local news publishers adversely.
- B. Social media platforms make much more money as compared to individual [KW& publishers].
- C. News publishers are better placed than social media platforms because of their size and information they have users.

Choose the correct answer from the options given below:

- A and B only
- B and C only
- A and C only
- A. B and C

Check

3. Correct information is needed by the citizens to make important decisions about their
A. communities
B. lives
C. governments
D. newspaper vendors

Choose the correct answer from the options given below:

A, B and C only

B, C and D only

A, C and D only

A, B, C and D

Check

4. Given below are two statements:

Statement I: There is rivalry among news publishers.

Statement II: Many social media platforms have gone bankrupt.

In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

Check

5. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Social media platforms are able to control the type of content that will appear in a reader's feed.

Reason R They do so because they are quite concerned about individual likes and dislikes of users.

In the light of the above statements, choose the most appropriate answer from the options given below:

Both A and R are correct and R is the correct explanation of A.

Both A and R are correct but R is not the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

15. Passage 15 - 12 Mar 2023 (E)

Read the paragraph given below and answer the question. (UGC NET 12 Mar 2023 Evening)

At home the post-pandemic normalisation has spurred a renewed demand for imported inputs. But abroad, it has had the opposite effect, leading to a decline in demand. Foreign households are no longer demanding so many goods now that the lockdowns that kept them in their houses and the fiscal stimuli that gave them the money to spend have both ended. So, India's imports have soared just at a time when its merchandise exports have started to fall.

Foreign demand will slow further as advanced countries slip into what now seem like inevitable recessions. In that case, India's Current Account Deficit (CAD) could widen even further, possibly to four percent of GDP in 2022-23 - double the level that the Reserve Bank of India (RBI) traditionally regards as "safe". How should India respond?

One possibility would be to attract foreign capital inflows worth at least four percent of GDP. But is this realistic? The world is currently facing unprecedented levels of uncertainty. After two years of the pandemic, we are witnessing a land war in Europe, the highest inflation in the developed world in the last four decades, the fastest pace of interest rate hikes in the history of the US Federal Reserve, an energy crisis in Europe, and slowdown in China that continues to struggle with Covid-19. In such an uncertain environment, foreign investors prefer to invest in safe assets such as US government bonds rather than emerging markets like India.

1. Given below are two statements:

Statement I: In the post-pandemic period, demand for goods has picked up both in India and abroad.

Statement II: Covid-19 pandemic is still not over in China.

In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is False but Statement II is true.

Check

2. What level of current account deficit is considered 'safe' by RBI in terms of percentage of GDP?

2%

3%

4%

5%

Check

3. The world is facing unprecedented uncertainty because of

- A. war in Europe
- B. high levels of inflation in developed countries
- C. energy crisis in Europe
- D. fast pace of interest hikes in US
- E. normalisation after the end of pandemic

Choose the most appropriate answer from the options given below:

A, B, C and D Only

B, C, D and E Only

A, C, D and E Only

A, B, C, D and E

Check

4. Given below are two statements:

Statement I: In an uncertain environment, foreign investors like to invest in emerging markets like India.

Statement II: According to the author, the current account deficit is likely to increase even further in 2022-23.
In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

Check

5. Current account deficit in India is increasing because of

- A. Rise in India's imports
- B. Rise in India's exports
- C. Increase in foreign capital inflows
- D. Fall in India's exports

Choose the most appropriate answer from the options given below:

A and B Only

B and C Only

A and D Only

C and D Only

Check

16. Passage 16 - 13 Mar 2023 (M)

Read the passage and answer the questions that follow: (UGC NET 13 Mar 2023 Morning)

In 1964, the African nation of Zambia and the East Asian country of South Korea were at roughly equivalent levels of development. Indeed, when Zambia achieved its independence in 1964, its prospects appeared far more promising than those of South Korea. Zambia was rich in copper, and its newly elected president, Kenneth Kaunda, was popular at home and respected abroad for his intelligence and seriousness of purpose. South Korea, in contrast, had no resources to speak of, was ruled by a despised and ridiculed military dictatorship, and depended heavily on American aid, which was being cut back.

More than five decades later, the two countries could not be more different. The economy of Zambia has failed miserably. In the thirty years after Kaunda's election, Zambian income per person fell until, by the mid-1990s, the average Zambian had barely half the income he'd had at independence. Faced with this development failure, Zambians voted Kaunda out of office amid substantial political unrest and widespread food riots. The government's failures were compounded by the AIDS epidemic that swept Africa in the 1990s.

While conditions have improved somewhat since then, Zambia still has one of the lowest standards of living in the world.

1. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Zambia was a rich and developed nation in 1964.

Reason (R): It had rich copper resources.

In light of the above statements, choose the most appropriate answer from the options given below:

- Both (A) and (R) are correct and (R) is the correct explanation of (A).
- Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (A) is correct but (R) is not correct.
- (A) is not correct but (R) is correct.

Check

2. Identify the correct statements:

- A. Conditions in Zambia have improved since the 1990s.
 - B. Zambia has one of the lowest living standards in the world.
 - C. Zambian leader Kenneth Kaunda was quite popular at home in 1990s.
- Choose the correct answer from the options given below:

- A and B only
- B and C only
- A and C only
- A B and C

Check

3. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): South Korea developed much faster than Zambia after 1964.

Reason (R): In 1964, conditions in South Korea were far more promising for growth and development than in Zam

In light of the above statements, choose the most appropriate answer from the options given below:

- Both (A) and (R) are correct and (R) is the correct explanation of (A).
- Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (A) is correct but (R) is not correct.
- (A) is not correct but (R) is correct.

 Check

4. Given below are two statements:

Statement I: In 1964, Zambia was far more developed than South Korea.

Statement II: Zambia was ruled by an elected president in 1964.

In light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

 Check

5. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): The Zambian leader was quite popular in his country in 1964.

Reason (R): Zambia achieved significant growth in its economy under his leadership.

In light of the above statements, choose the most appropriate answer from the options given below:

- Both (A) and (R) are correct and (R) is the correct explanation of (A).
- Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (A) is correct but (R) is not correct.
- (A) is not correct but (R) is correct.

 Check

17. Passage 17 - 13 Mar 2023 (E)

Read the following passage and answer the question: (UGC NET 13 Mar 2023 Evening)

Landlocked countries, regions with diseases that are difficult to control or cure, and areas that are very far from major markets for their goods are all at a developmental disadvantage - and this disadvantage was probably greater in an earlier era, when medical knowledge was limited and transportation and communications costs were much higher. By virtue of weather and disease, tropical environments in particular may be less conducive to urbanization and industrialization than temperate zones. Some scholars ascribe a substantial portion of the developmental problems of tropical regions like sub-Saharan Africa, for example, to geography itself.

But geographic factors cannot be the whole story, as there is a great deal of variation among countries within the same regions. Indeed, if we compare less developed countries - that have very similar geographic characteristics, we find that some have done extremely well, while others have done very poorly. While the climate and geography of a nation shape its development, they do so by way of their impact on the people, social structures, politics, and policies of the nation.

1. Given below are two statements:

Statement I: Tropical regions seem to have more favourable conditions for the growth of industrialization than the regions.

Statement II: Geographic factors alone determine the development of a nation.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

2. Climate and geography of a place greatly influence its:

- A. Policies
- B. People
- C. Politics
- D. Social structures

Choose the correct answer from the options given below:

- A, B and C only
- B, C and D only
- A, B and D only
- A, B, C and D

Check

3. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R
Assertion A: The developmental disadvantage of landlocked countries was far greater in earlier times.
Reason R: Transportation and communication costs in earlier time, were much higher.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

4. Given below are two statements:

Statement I: All countries in the tropical region have performed very poorly in terms of development.

Statement II: Tropical regions seem to have disease prone environments.

In the light of the above statements, choose the coned answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement 1 is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

5. Which of the following places are at a developmental disadvantage?

- A. Landlocked countries
 - B. Regions with diseases that are easy to control or cure.
 - C. Places that are far from major maxims for their goods.
- Choose the most appropriate answer from the options given below:

- A and B only
- B and C only
- A and C only
- A, B and C

Check

18. Passage 18 - 14 Mar 2023 (M)

Read the following passage and answer the question (UGC NET 14 Mar 2023 Morning)

A SPACEX rocket was launched from California carrying a US-French satellite designed to conduct the first global survey of the Earth's Surface waters, shedding new light on the mechanics and consequences of climate change. The Surface Water and Ocean Topography satellite, or SWOT, incorporates advanced microwave radar technology to collect high definition measurements of ocean, lakes, reservoirs and rivers over 90% of the globe. The data compiled from radar sweeps of the planet at least twice every 21 days, will be used to enhance ocean-circulation models, bolster weather and climate forecasts and aid in managing scarce freshwater supplies in drought-stricken regions. Components of the SUV sized satellite were built primarily by NASA's Jet Propulsion Laboratory near Los Angeles and the French space agency CNES. Nearly 20 years in development by the US space agency with contributions from its counterparts in Canada and Britain. SWOT was one of 15 missions listed by the National Research Council as projects NASA should undertake in the coming decade. One major thrust of the mission is to explore how oceans absorb atmospheric heat and carbon dioxide in a process that naturally regulates global temperatures and has helped to minimize climate change.

1. The data collected from SWOT satellite will be used in
- A. earthquake prediction
 - B. improving weather and climate forecasts
 - C. enhancing ocean circulation models
 - D. managing freshwater supplies in drought prone regions.
- Choose the most appropriate answer from the options given below:

- A, B and C only
- B, C and D only
- A, B and D only
- A, C and D only

Check

2. How many years has it taken the US space agency to develop the SWOT satellite?

- ≈10 years
- ≈20 years
- ≈30 years
- ≈40 years

Check

3. Given below are two statements:

Statement I: SWOT satellite will monitor the surface waters over the entire earth.

Statement II: SWOT satellite is expected to improve our understanding of climate change.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

 Check

4. SWOT satellite has primarily been built by

- A. France
- B. Germany
- C. Russia
- D. US

Choose the most appropriate answer from the options given below:

- A and B only
- B and C only
- A and D only
- C and D only

 Check

5. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Oceans help in minimising climate change.

Reason R: Oceans absorb carbon dioxide.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

 Check

19. Passage 19 - 14 Mar 2023 (E)

Read the passage and answer the questions that follow (UGC NET 14 Mar 2023 Evening)

For more than nine decades scientists have tried to replicate the process that produces energy for the sun and stars-fusion. On Tuesday, researchers at the National Ignition Facility (NIF) in California, USA, announced a milestone in this endeavour. They merged two nuclei to produce a heavier nucleus. Their reactor produced about 1.5 times more energy than what was used in the process. In all the earlier attempts to harness the power of fusion, the reactors used up more energy than what was produced. But scientists say that it will be at least two decades before the process pioneered in the California laboratory can be scaled up. Even then, in a world desperately searching for technologies that can power the developmental needs of nations adding to the GHG load, the break-through at NIF has generated excitement.

Several countries are shifting to renewable energies to meet their international climate-related commitments. Yet, power generation currently is responsible for 25-30 percent of global GHG emissions. The inherently unstable nature of renewables means that countries find it very difficult to jettison fossil-fuel energy sources. Conventionally-produced nuclear energy—that uses fission technology—is relatively cleaner. But accidents at Chernobyl in 1986 and Fukushima in 2011 have raised serious questions over the safety of fission-powered plants.

1. According to current estimates, power generation accounts for how much of the total GHG emissions on earth?

- 10-15 percent
- 25-30 percent
- 40-45 percent
- 50-55 percent

Check

2. Given below are two statements:

Statement I: Energy produced in the sun and the stars is through fission.

Statement II: Energy produced through fission is relatively cleaner as compared to that from fossil fuels.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

3. Scientists have been trying to produce energy through fusion for

- The last 20 years
- The last 40 years
- The last 50 years
- More than 90 years

Check

4. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R
Assertion A: Several countries of the world are moving towards renewable energy sources for their development r
Reason R: The renewable resources of energy are of stable nature.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

5. For every 100 units of energy consumed in the process of fusion, the National Ignition Facility in California was produce how many units of energy?

- 50
- 100
- 125
- 150

Check

20. Passage 20 - 15 Mar 2023 (M)

Read the passage and answer the questions that follow (UGC NET 15 Mar 2023 Morning)

Annual consumer price index (CPI) inflation fell to 5.88 per cent in November, from the previous month's 6.77 per cent and below the RBI 6 per cent upper tolerance limit for the first time since December, 2021. The Index of Industrial Production (IIP) contracted 4 per cent year-on-year in October, led by manufacturing (minus 5.6 per cent) and also the sub-sectors that are proxies for consumption and investment activity: Consumer durables (minus 15.3 per cent), non-durables (minus 13.4 per cent) and capital goods (minus 2.3 per cent). Clearly, the pent-up demand that fuelled consumption spending post the lifting of Covid-19 restrictions has ebbed. Nor are there signs of a fresh investment cycle, even as exports — which were doing well till September — have entered negative territory on the back of a global slowdown.

That said, the evidence on growth slowing is more compelling than on inflation moderating. The latter's decline in November had mainly to do with food, which registered a steep dip to 4.67 per cent from 7.01 per cent in October. That, in turn, was courtesy of vegetables and fruits. These recorded inflation of minus 8.08 per cent and 2.62 per cent, basically reflecting a seasonal trend: Winter is when supply of fresh produce, from tomatoes to cole crops (e.g. Cauliflower, cabbage, broccoli etc.) and leafy greens, turns plentiful and affordable.

1. In October, the index of Industrial production fell by

- 5.88%
- 6.77%
- 4%
- 5.6%

Check

2. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Consumption levels increased sharply after Covid-19 restrictions were lifted.

Reason (R): The demand for goods had accumulated due to frequent Covid-19 restrictions and lockdowns.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

3. Which of the following registered the maximum percentage reduction in October?

- Manufacturing
- Consumer durables
- Non-durables
- Capital goods

Check

4. Given below are two statements:

Statement I: All the food items this November were cheaper as compared to November last year.
Statement II: Vegetables this November were cheaper than those last November

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

5. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Food Inflation in winters is generally low.

Reason (R): The demand for food items in winter is lower than that in other seasons.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

21. Passage 21 - 16 Mar 2023 (M)

Read the following passage and answer the questions that follow: (UGC NET 16 Mar 2023 Morning)

Malthus (1766-1834) produced his Essay on the Principle of Population in 1798. He said that the crux of the population problem was the existence of a tendency in mankind to increase, if unchecked, beyond the possibility of an adequate supply of food in a limited territory'. Malthus thought that an increased food supply was achieved mainly by bringing more land into arable production. He maintained that while the supply of food could, at best only be increased by a constant amount in arithmetic progression the human population tends to increase in geometrical progression the human population tends to increase in geometrical progression multiplying itself by a constant amount each time. In time, population would outstrip food supply until a catastrophe occurred in the form of famine, disease or war. War would occur as human groups fought over increasingly scarce resources. These limiting factors maintained a balance between population and resources in the long term. In a later paper, Malthus placed significant emphasis on 'moral restraint' as an important factor in controlling population.

Clearly, Malthus was influenced by events in and before the eighteenth century and could not have foreseen the great advances that were to unfold in the following two centuries that have allowed population to grow at an unprecedented rate, alongside a huge rise in the exploitation and use of resources. There have been many advances in agriculture since the time of Malthus that have contributed to huge increases in agricultural production. These advances include: the development of artificial fertilizers and pesticides, new irrigation techniques, high yielding varieties of crops, cross-breeding of cattle, greenhouse farming and the reclamation of land from the sea.

1. Given below are two statements:

Statement I: Growth in arithmetic progression is faster than that in geometrical progression.

Statement II: The only paper that Malthus came out was his Essay on the Principle of Population.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

 Check

2. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Malthus could accurately predict the population growth that has taken place in the last two centuries:
Reason (R): He believed that food supply could be increased by bringing more land into arable production.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

 Check

3. Given below are two statements:

Statement I: Malthus believed that population grows faster than the food supply.

Statement II: Malthus was greatly influenced by events that occurred in the nineteenth century.

In the light of the above statements, choose the correct answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

Check

4. Malthus believed that food supply could be increased by

Use of artificial fertilisers

Use of pesticides

Use of high yielding varieties of crops

Bringing more land into arable production

Check

5. According to Malthus's Essay on the Principle of population, human population would be kept in check by

A. War

B. Moral Restraint

C. Famine

D. Disease

Choose the correct answer from the options given below:

A, B and C only

B, C and D only

A, C and D only

A, B, C and D

Check

22. Passage 22 - 21 Mar 2023 (M)

Read the following passage and select the most appropriate option for question: (UGC NET 21 Mar 2023 Morning)

Reputed author Illich is best known for his sharp criticism of the deleterious character of expert-based institutions. These ranged from medicine and education to energy and transportation. The disempowering effects of feminization of work and the narrowing down of gender struggles to a matter of individual economic and political equality were also there. His book, tools for conviviality summarised many of his critiques. They were set in the context of a political vision, namely, the reconstruction of convivial modes of living. He termed it as 'conviviality'. The book was self-consciously written as an epilogue to the industrial era. The conviction behind it was that in the advanced stage of mass production, any society produces its own destruction. His key concept was related to the industrial mode of production. He averred that industrial tools beyond a point would damage people and environment. The steady erosion of limits started in the seventeenth century with the harnessing of energy. Added to it was the progressive elimination of time and space that gained force with the industrial Revolution. It accomplished a complete restructuring of society in the twentieth century, aided by tools and technologies of specialized knowledge.

1. What was the criticism of Illich on expert-based institutions?

- Non-professionalism in sectors like medicine and transport
- Too much expertise in the field of education
- Adverse effects of feminization of work
- Danger to economic progress

Check

2. His critiques were set in the context of

- Global historicity
- Convivial modes of living
- Self-degradation
- Ethical norms

Check

3. What did Illich foresee in his book?

- Industrial Society's self-destruction
- More scope for mass production
- Arrival of advanced industrial society
- End to all struggles in the world

Check

4. The consequences of Industrial Revolution are:

- A. Damage to environment
- B. Restricted use of energy
- C. Conquest of time and space
- D. Minimal use of resources

Choose the correct answer from the options given below:

A and B only

B and C only

C and D only

A and C only

Check

5. The inference from the passage is that:

Specialized expertise is absolutely essential.

An industrial society is a welfare society.

Conviviality should have its own limits.

Industrialization is highly beneficial

Check

23. Passage 23 - 21 Mar 2023 (E)

Read the following passage and answer the questions: (UGC NET 21 Mar 2023 Evening)

The progress of the Salt March can also be traced from another source: the American news magazine, Time'. Earlier it despised Gandhiji's looks, writing disdainfully, of his "spindly frame" and his "spidery loins". In its first report, Time was deeply sceptical of the Salt March reaching its destination. It claimed that Gandhiji "sank to the ground" at the end of the second day's walking, the magazine did not believe that "the emaciated saint would be physically able to go much further". But within a week it had changed its mind, observing the massive popular following that the march had garnered. They then saluted Gandhiji as a "Saint" and "Statesmen", who was using "Christian acts as a weapon against men with Christian beliefs" The Salt March gained the world's attention. The march was widely covered by the European and American press. It was the first nationalist activity in which women participated in large numbers. The socialist activist Kamaladevi Chattopadhyay had persuaded Gandhiji not to restrict the protests to men alone. Kamaladevi was herself one of numerous women who courted arrest by breaking the salt or liquor laws. The march made the British realize that their dominance would not last forever and that they would have to devolve some power to the Indians.

1. What was the initial response of western press to Gandhiji's salt march?

- Skeptical
- Appreciative
- Deceptive
- Neutral

Check

2. How did Time magazine describe Gandhiji's salt march in its first report?

- People would reject the march.
- He would not be able to complete it.
- The British supported the march.
- Gandhiji had the physical strength to lead the march.

Check

3. What was the first effect of the salt March?

- People were confused.
- Gandhi's followers were reluctant.
- Gandhi was able to garner world attention.
- Gandhiji's faith in Christianity got reinforced

Check

4. The salt march was the first nationalist movement to attract/incur

- The attention of American press
- Comments by the European Press
- The wrath of the British Government
- A large number of women participants

Check

5. According to the passage, the most significant outcome of the salt march was that

- The British were able to nullify the effects of the movement.
- Gandhiji could not achieve his aim of breaking the salt law.
- The British realized the need for devolution of power with Indians.
- The salt march ended as a mere local movement of tokenism.

Check

24. Passage 24 - 22 Mar 2023 (M)

Read the following passage and answer the question: (UGC NET 22 Mar 2023 Morning)

What is it that tutors do, or should do, in support of the online learner? Some have sought to explore and clarify by the adoption of particular metaphors, such as moderator, mentor, or facilitator, to describe the tutor's role. These terms have their value in guiding our behaviour as online tutors, but their force is primarily to warn us to stand aside. The evidence is that too much, or inappropriate, contribution to tutorial discussion by the tutor can inhibit contributions by the students. The rhetoric of facilitator and moderator speaks of a duty to liberate the students, and empower them to participate in their own learning. This has the ring of critical pedagogy about it, which would seek to remove the authority of the teacher, casting teacher and learner as equal participants in the educational endeavour. Such protestations of equality will ultimately show themselves to have been disingenuous, however, when the imperative of assessment rears its ugly head. Worse, though, is the fact that these formulations guide us about what we shouldn't do, but remain rather silent about what we should be doing. If the online tutor is going to move from centre stage and sacrifice some ideas of his or her sagacity, what sorts of roles might be taken up to contribute to the guidance of the online learner? There are paradoxes here.

1. What has been done to describe the role of online tutors?

- Add value to their guidance.
- Provide them with a warning system.
- Clarify their duties in fields other than education.
- By adoption of certain metaphors.

Check

2. What will inhibit student's contribution to tutorial discussion?

- Too much contribution of the tutor.
- Disruption during tutorials.
- Internal divisions.
- Outside intervention

Check

3. The rhetoric of moderators has the intention to:

- Displace teachers from teaching
- Liberate students for their own learning
- Strengthen the authority of teachers
- Avoid critical pedagogy

Check

4. The discourse of participatory learning may result in:

- Abandonment of the online tutorial system
- Vigorous student protestation
- Emergence of dos and don'ts guidelines
- Supervisory role of students

Check

5. The passage is an analysis of:

- The traditional educational system
- The new assessment methodology
- Indian Vocational education
- Paradoxes of online tutoring

Check

25. Passage 25 - 22 Mar 2023 (E)

Read the following passage and answer the question. (UGC NET 22 Mar 2023 Evening)

Gordon Childe used the term urban revolution to describe the change in society marked by the emergence of the first cities some 5500 years ago. The areas that first witnessed this profound social economic change were:

- Mesopotamia - the valleys of the Tigris and Euphrates rivers
- The lower Nile valley.
- The plains of the river Indus.

Later, urban civilisations developed around the Mediterranean, in the Yellow River valley of China, in South East Asia and in the Americas. Thus the first cities mainly emerged in areas that are now considered to be LICs.

The catalyst for this period of rapid change was the Neolithic Revolution, which occurred about 8000 BCE. This was when sedentary agriculture, based on the domestication of animals and cereal farming, steadily replaced a nomadic way of life. As fanning advanced, irrigation techniques were developed. Other major advances that followed were the ox-drawn plough, the wheeled cart, the sailing boat and metallurgy. However, arguably the most important development was the invention of writing in about 4000 BCE. for it was in the millennium after this that some of the villages on the alluvial plains between the Tigris and Euphrates rivers increased in size and changed in function so as to merit the classification of urban.

Considerably later than the first cities, trading centres began to develop. The Minoan civilisation cities of Knossos and Phaistos, which flourished in Crete during the first half of the second millennium BCE, derived their wealth from maritime trade. Next it was the turn of the Greeks and then the Romans to develop urban and trading systems on a scale larger than ever before.

1. Based on the information given in the passage, arrange the following events in correct chronological order.

- A. Emergence of the first cities
- B. Neolithic Revolution
- C. Invention of writing
- D. The Minoan civilisation cities which flourished in Crete

Choose the correct answer from the options given below:

A, B, C, D

B, C, D, A

C, A, B, D

B, A, C, D

Check

2. The term LICs in the passage most likely represents

Lower Indo-China

Later Indus and China

Low Income Countries

Laos India and China

Check

3. Which major development led to the transformation of villages in the plains between Euphrates and Tigris, into centres?

- The Emergence of wheeled cart
- Neolithic Revolution
- Metallurgy
- Invention of writing

 Check

4. Arrange the following places where urban centres developed, in correct chronological order.

- A. Greece
- B. Crete
- C. Rome
- D. The plains of river Indus

Choose the correct answer from the options given below:

- D, B, A, C
- D, C, B, A
- A, D, B, C
- A, D, C, B

 Check

5. Given below are two statements:

Statement I: Urban centres in China developed before they developed in the plains of Indus River
Statement II: Trading centres developed much later than the first cities.

In the light of the above statements, choose the correct answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

 Check

26. Passage 26 - 23 Mar 2023 (M)

Read the following passage and answer the question: (UGC NET 23 Mar 2023 Morning)

Ideally, scientists deduce conclusions from general laws that they know to be true. For example, if we know that massive objects attract each other (because of gravity), then it follows that an apple will fall to the ground when it releases from the tree. This logical reasoning from general to specific is known as deductive reasoning. Often however, we do not know general laws that guide natural systems. We observe, for example, that birds appear and disappear as a year goes by. Through many repeated observations in different places, we can infer that the birds move from place to place. We can develop a general rule that birds migrate seasonally. Reasoning from many observations to produce a general rule is inductive reasoning. Although deductive reasoning is more logically sound than inductive reasoning, it only works when our general laws are correct. We often rely on inductive reasoning to understand the world because we have few immutable laws.

Sometimes it is insight, as much reasoning that leads us to an answer. Many people fail to recognize the role that insight, creativity, and luck play in research, some of our most important discoveries were made not because of superior scientific method and objective detachment, but because the investigators were passionately interested in their topics and pursued hunches that appeared unreasonable to fellow scientists.

1. Given below are two statements:

Statement I: The fact that an apple will fall to the ground when it releases from the tree, is an example of deductive reasoning.

Statement II: Most important scientific discoveries are made only because of sound reasoning of the investigators

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

2. Given below are two statements:

Statement I: The inference that birds migrate seasonally is an example of deductive reasoning.

Statement II: Deductive reasoning is always correct.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

3. Which among the following play a role in achieving success in research?

- A. Reasoning
- B. Insight
- C. Luck

Choose the most appropriate answer from the options given below:

A and B only

B and C only

A and C only

A, B and C only

Check

4. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: We often rely on inductive reasoning in our day-to-day life.

Reason R: Inductive reasoning is more sound logically as compared to deductive reasoning.

In the light of the above statements, choose the most appropriate answer from the options given below:

Both A and R. are correct and R is the correct explanation of A.

Both A and R are correct but R is not the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

Check

5. According to the passage, some of the scientists were able to make important discoveries primarily because of

A. Passionate interest in the subject

B. Superior scientific method

C. Objective detachment

Choose the correct answer from the options given below:

A only

B and C only

A and B only

A, B and C

Check

27. Passage 27 - 23 Mar 2023 (E)

Read the following passage and answer the question: (UGC NET 23 Mar 2023 Evening)

As adults we develop a complex set of emotional expressions and perceptual understanding of our own and others emotional states. Infants appeal to have two innate rudimentary emotional arousal responses to stimuli 'elected to' as approach and avoidance. The infant's emotional life consists of little more than these two arousal states an attraction to pleasant stimulation therefore eliciting approach and withdrawal or avoidance of unpleasant stimulation. Given that this is the nature of emotional arousal the new-born arrives equipped with, the approach avoidance response makes perfect evolutionary sense. This is all the new-born needs at this juncture in their lifespan development. It might also suggest that infants are born with an innate understanding of the meaning intended in the emotional facial expressions of others. Hence if the caregiver adopts a playful posture and comes a happy facial expression then the infant will be in an approach arousal state and most likely respond positive, by mirroring the expression portrayed. The opposite also applies, however, where parents adopting a despondent posture are likely to initiate an avoidance arousal state in the infant. Under these circumstances the infant will feel uncomfortable and want the situation to change. In an avoidance arousal state the infant will exhibit behaviours designed to provoke a change in the parent's behaviour such as crying and 'pick-me-up' gesturing or sucking an object such as a pacifier in the edge of a blanket. A continuation of parental despondency could have serious consequences for the infant's normal socioemotional development. This could lead to alterations to the infant's sleeping patterns and increase levels of irritability, anger and anxiousness. An infant's avoidance of aversive situations is limited due to their immature motor development so they resort to simple avoidance tactics such as turning the head gaze avoidance and crying. These types of behaviours are attempts at modulating their emotional arousal state.

1. The above passage has most likely been taken from a text on

- Human Biology
- Parent Education
- Emotional Development
- Children Upbringing

Check

2. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: An infant's avoidance of unpleasant stimulations or situations is limited.

Reason R: An infant is unable to decode the emotions expressed from other's faces.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

3. The angry face of a parent will most likely generate which among the following responses in a new born child.

- Crying
- A smiling face to pacify the parent
- Sucking the edge of a blanket
- 'Pick-me-up' gesture

Check

4. Given below are two statements:

Statement I: 'Approach' is an emotional arousal response in an infant towards pleasant stimulation.
Statement II: An infant has little understanding of the emotions conveyed through facial expressions of others.
In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

5. Continued parental despondency could cause which of the following changes in an infant?

- A. Alteration in sleep pattern
- B. Increasingly irritable behaviour
- C. Reduction in anxiety levels
- D. Increased anger

Choose the correct answer from the options given below:

- A, B and C only
- A, B and D only
- B, C and D only
- A, B, C and D only

Check

28. Passage 28 - 24 Mar 2023 (M)

Read the following passage and answer the question. (UGC NET 24 Mar 2023 Morning)

In both rich and poor countries, native or indigenous people are generally the least powerful, most neglected groups in the world. Typically descendants of the original inhabitants of an area taken over by more powerful outsiders, they are distinct from their country's dominant language, culture, religion, and racial communities. Of the world's nearly 6,000 recognized cultures, 5,000 are indigenous ones that account for only about 10 percent of the total world population. In many countries, traditional caste systems, discriminatory laws, economics, or prejudice repress indigenous people. Their unique cultures are disappearing, along with biological diversity as natural habitats are destroyed to satisfy industrialized world appetites for resources. Traditional ways of life are disrupted further by dominant Western culture sweeping around the globe.

At least half of the world's 6,000 distinct languages are dying because they are no longer taught to children. When the last few elders who still speak the language die, so will the culture that was its origin. Lost with those cultures will be a rich repertoire of knowledge about nature and a keen understanding of a particular environment and way of life. Interestingly, just 12 countries account for 60 percent of all human languages, seven of these are also among the "mega diversity" countries that contain more than half of all unique plant and animal species. Conditions that support evolution of many unique species seem to (avow development of equally diverse human cultures as well.

1. The most appropriate title for the passage is:

- State of the indigenous world
- Biodiversity conservation measures
- Indigenous people and world's biodiversity
- Empowerment of indigenous people

Check

2. Given below are two statements:

Statement I: Majority of indigenous cultures are confined to a very few countries of the world.

Statement II: Majority of world population consists of indigenous people.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

3. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.
Assertion A: Indigenous people live in harmony with nature
Reason R: Biodiversity tends to thrive at places where indigenous culture thrive.
In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

4. Which among the following inferences can be drawn from the passage?
- A. Indigenous people in rich countries are generally neglected and their voices remain unheard.
 - B. Native people in the poor countries are quite powerful.
 - C. Most of the world population belongs to indigenous cultures
 - D. Indigenous people possess unique cultures
 - E. Indigenous cultures are facing a threat from western culture

Choose the most appropriate answer from the options given below:

- A, B, C, D and E
- A, C, D and E only
- A, D and E only
- B, C, D and E only

Check

5. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.
Assertion A: Western culture supports indigenous people and their traditional ways of life.
Reason R: Indigenous people possess ecological wisdom about their natural habitat.
In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

29. Passage 29 - 24 Mar 2023 (E)

Read the following passage and answer the questions that follow: (UGC NET 24 Mar 2023 Evening)

In 1882 the Punjab University was established by a Special Act of Incorporation and in 1887 another Special Act of Incorporation established the fifth Indian university at Allahabad. The general framework of these two Special Acts of Incorporation was similar to the Acts of 1857 though power was given to the Senates of the Punjab and the Allahabad Universities to appoint or provide for the appointment of Professor and Lecturers"- a privilege which was denied by the Acts of Incorporation to the first three universities at Calcutta, Bombay and Madras in 1857. The first three universities were deliberately intended to be examining universities only, in the same manner and on the same model as the then University of London. Thereby it ignored an important suggestion of the Education Despatch of 1854 which suggested possible institution of "professorships for the purpose of the delivery of lectures in various branches of learning for the acquisition of which, at any rate in an advanced degree, facilities do not now exist in other institutions in India: When Lahore and Allahabad got this privilege in 1882 and 1887, respectively, The Indians had asked for its extension to Calcutta, Bombay and Madras but European officials closely connected with the university contested it on two grounds.

1. Given below are two statements:

Statement I: All the Special Acts of Incorporation by which universities were established in India were exactly the same.
Statement II: The first university in India to be granted the power to appoint Professor and Lecturers was Allahabad University.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

2. Given below are two statements:

Statement I: Allahabad University and Punjab University were established at the same time.

Statement II: Bombay University and Madras University were established at the same time.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

3. Identify the first three universities established in India

- A. Allahabad
- B. Punjab
- C. Calcutta
- D. Bombay
- E. Madras

Choose the correct answer from the options given below:

A, B and C only

B, C and D only

C, D and E only

B, D and E only

 Check

4. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: When Calcutta University was established, it was also granted the power to appoint Professors and I
Reason R: Education Despatch of 1854 suggested the possible institution that could appoint Professors.

In the light of the above statements, choose the most appropriate answer from the options given below:

Both A and R. are correct and R is the correct explanation of A.

Both A and R are correct but R is not the correct explanation of A.

A is correct but R is not correct.

A is not correct but R is correct.

 Check

5. Given below are two statements:

Statement I: University of London was an examining university only.

Statement II: All suggestions of Education Despatch of 1854 were accepted when University of Madras was estab

In the light of the above statements, choose the most appropriate answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

 Check

30. Passage 30 - 28 Mar 2023 (M)

Read the following passage and answer the question. (UGC NET 28 Mar 2023 Morning)

The idea of the 'White Man's Burden' was promoted and popularized by Rudyard Kipling through his similarly titled poem written in 1899. By 1860 the British expansion in India was complete. Camoy uses the White Man's Burden as a motivating factor for British expansion in the eighteenth century, a century before it was even conceptualized. Contrary to Camoy's assumption, missionaries often fought for the rights of the local population from the very beginning. Rev V. Taylor, after witnessing the execution of a Kannada peasant in Dharwar district, fought for the recognition of Kannada as a court language in the Bombay Presidency in 1836. This entirely Kannada-speaking district had Marathi village and district officers due to the pre-colonial Peshwa rule. The system was continued under the colonial rule. The execution took place because the peasant charged with murder had given his testimonial in Kannada, which was recorded in Marathi by the native official, and the court proceeding was conducted in Hindustani. The prisoner, ignorant of both Marathi and Hindustani, unwillingly expressed assent to the confession. There was no circumstantial evidence against him that he was charged with murder and later executed. Taylor effectively fought for the introduction of Kannada as the language of administration and education. Within six months Kannada, was made a court language and twenty-seven Kannada primary schools were established in the district.

1. Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: The village and district officers in Dharwar district were Kannada.

Reason R: Dharwar district in the pre-colonial era was ruled by the Peshwa.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both A and R. are correct and R is the correct explanation of A.
- Both A and R are correct but R is not the correct explanation of A.
- A is correct but R is not correct.
- A is not correct but R is correct.

Check

2. The testimonial given by the peasant was recorded in:

- Hindustani
- Kannada
- Marathi
- English

Check

3. Given below are two statements:

Statement I: Carnoy was in favour of British expansion in India

Statement II: Carnoy believed in the supremacy of White Man.

In the light of the above statements, choose the most appropriate answer from the options given below:

- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.

Check

4. The peasant who was executed, was conversant in which of the following languages?

- Hindustani
- English
- Marathi
- Kannada

Check

5. Identify those who were sympathetic to the rights of the local population:

- A. Rudyard Kipling
- B. V.Taylor
- C. Carmoy

Choose the most appropriate answer from the options below:

- A and B only
- B only
- B and C only
- C only

Check

31. Passage 31 - 28 Mar 2023 (E)

Read the passage carefully and answer the question that follows: (UGC NET 28 Mar 2023 Evening)

The Afghan pressures on Chitral, which had already been drawn close to the Indian empire through its allegiance to Kashmir in late 1876, assumed seriousness in 1882 when Kabul claimed this territory as one of its protected states. Though the Government of India was quick in rebutting such claims, the reported Russian intrigues in and around Chitral caused additional concern. The newly-established Resident in Kashmir could hardly extend effective control of the Durbar or even the British Indian government over the turbulent chiefships of Hunza and Nagar. The Panjdeh crisis of 1885 also helped in focusing the British military opinion on the need to make elaborate arrangements for the defence of the north-west frontier. So it was not a mere coincidence that the year 1885 was marked by the dispatch of two exploratory missions, one under Col. Lockhart, the Deputy Quarter Master General of India, to survey the lands south of Hindu Kush via Gilgit and Chitral, and the other under Ney Elias to Chinese Turkestan and the Pamirs. Meanwhile the Defence Committee's recommendation for extending the Srinagar-Rawalpindi cart-road to Gilgit and Chitral had been approved by Dufferin. The new Commander-in-Chief, F. Roberts, even suggested that 'we should have political control over the country around Chitral and Gilgit in order to secure the approaches to the former by the Dora pass and to the latter through Wakhan.'

1. Who was entrusted with the responsibility to survey the Chinese Turkestan?

- Col. Lockhart
- Ney Elias
- Dufferin
- F. Roberts

Check

2. The areas in and around Chitral witnessed conflicting claims from

- A. Afghans
- B. Russians
- C. British

Choose the correct answer from the options given below:

- A and B only
- B and C only
- A and C only
- A, B and C

Check

3. Given below are two statements:

Statement I: Approach to Chitral was through Wakhan

Statement II: Lands situated south of the Hindu Kush could be approached via Chitral and Gilgit.

In the light of the above statements, choose the most appropriate answer from the options given below:

Both Statement I and Statement II are true.

Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Statement I is false but Statement II is true.

Check

4. The British were finding it challenging to control

A. Chitral

B. Hunza

C. Nagar

Choose the correct answer from the options given below:

A and B only

B and C only

A and C only

A, B and C only

Check

5. Arrange the following events in correct chronological order:

A. Afghans claiming Chitral as its protected state.

B. Panjdeh Crisis

C. Allegiance of Chitral to Kashmir

Choose the correct answer from the options given below:

A, B, C

B, C, A

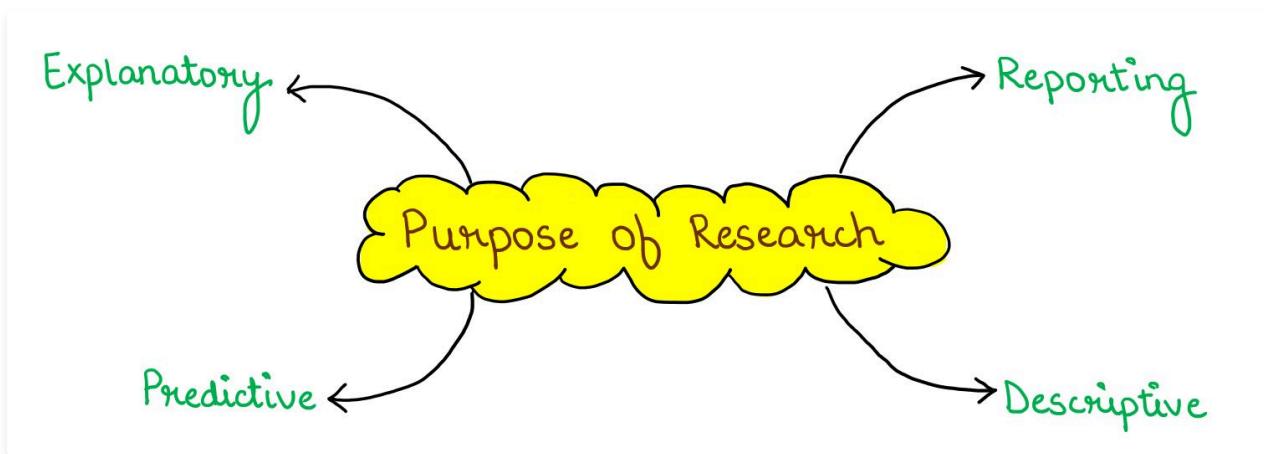
C, A, B

C, B, A

Check

Introduction to Research

Research is a structured and methodical investigation that offers valuable insights to aid in decision-making. Its core purpose lies in gathering, analyzing, and disseminating pertinent data and information, empowering decision makers to make informed choices that optimize performance.



Various types of research exist, each serving specific purposes.

Reporting studies consolidate data to provide a comprehensive understanding or generate statistics for comparison. For instance, an economic report might analyze market trends to help a company strategize its investments.

Descriptive studies seek answers to questions like who, what, when, where, and sometimes how. For instance, a survey exploring the preferences of customers in a particular region would be a descriptive study.

Explanatory studies delve deeper into understanding the reasons behind observed phenomena. For example, an investigation into the causes of declining employee productivity within a company falls under this category.

Predictive studies aim to forecast when and under what circumstances a particular event might occur. For instance, a weather forecast predicting the likelihood of rain for a specific date and location is a predictive study.

Research can be further categorized into applied research and basic research.

Applied research is geared towards finding immediate solutions to problems or capitalizing on opportunities. For example, a medical researcher developing a new treatment for a disease is conducting applied research.

On the other hand, **basic research** seeks to address complex questions or gain new knowledge of experimental or theoretical nature, with little direct or immediate impact on action, performance, or policy decisions. An astrophysicist studying the fundamental properties of black holes is an example of basic research.

1. Research is (UGC NET Jun 2010)

- Finding solution to any problem
- Working in a scientific way to search for truth of any problem
- Searching again and again
- None of the above

Check

Question: 1 of 1 questions

Characteristics of Research



Good research possesses several key characteristics that distinguish it as reliable, valid, and impactful. Here are some important characteristics of good research:

- *Clear Purpose and Objectives*: Good research starts with a well-defined and focused purpose. The research objectives should be specific, measurable, achievable, relevant, and time-bound (SMART).
- *Relevance*: Good research addresses significant questions or issues that are relevant to the field of study or have practical applications in real-world contexts.
- *Methodological Rigor*: The research design and methodology should be robust, appropriate, and well-planned to ensure the collection of accurate and reliable data.
- *Validity*: Good research ensures that the methods used and the data collected accurately measure or represent what they are intended to measure or represent. Internal and external validity are critical aspects to consider.
- *Reliability*: The research findings should be consistent and replicable, meaning that if the study were repeated, it would yield similar results.
- *Transparency and Reproducibility*: A hallmark of good research is the transparency of methods and data, allowing other researchers to reproduce the study and verify its results.
- *Ethical Considerations*: Good research adheres to ethical principles and guidelines, ensuring the protection of participants' rights and privacy, as well as the responsible conduct of research.
- *Appropriate Sample Size and Sampling Technique*: The sample size should be sufficient to draw meaningful conclusions, and the sampling technique should be unbiased and representative of the target population.
- *Data Analysis*: The data analysis should be appropriate for the research design and objectives. Statistical methods or qualitative analysis techniques should be used accurately.
- *Logical Interpretation of Results*: Good research involves an objective and unbiased interpretation of the findings, discussing their implications, limitations, and potential applications.
- *Peer Review*: Publication in reputable journals and undergoing peer review is an essential characteristic of good research, as it ensures scrutiny and validation by experts in the field.
- *Generalizability*: The findings of good research should be relevant beyond the specific context of the study and have implications for broader populations or situations.
- *Clear Communication*: Good research is effectively communicated through well-written reports, papers, or presentations, making the findings accessible to the intended audience.

By adhering to these characteristics, researchers can enhance the quality and impact of their studies, contributing to the advancement of knowledge and informed decision-making.

1. In the list of statements given below which of them offer a suitable definition of research? (**UGC NET 18 Dec 2016 Morning**)

- (a) Research means a repeated search
- (b) Research is basically an answer to a question.
- (c) Research provides an authentic solution to a problem.
- (d) Research is an Endeavour to prove one's hypothesis.
- (e) Research is a meaning-giving process
- (f) Research means drawing a sample from a defined population.

(a), (d) and (f)

(b), (c) and (e)

(a), (b) and (c)

(b), (c) and (f)

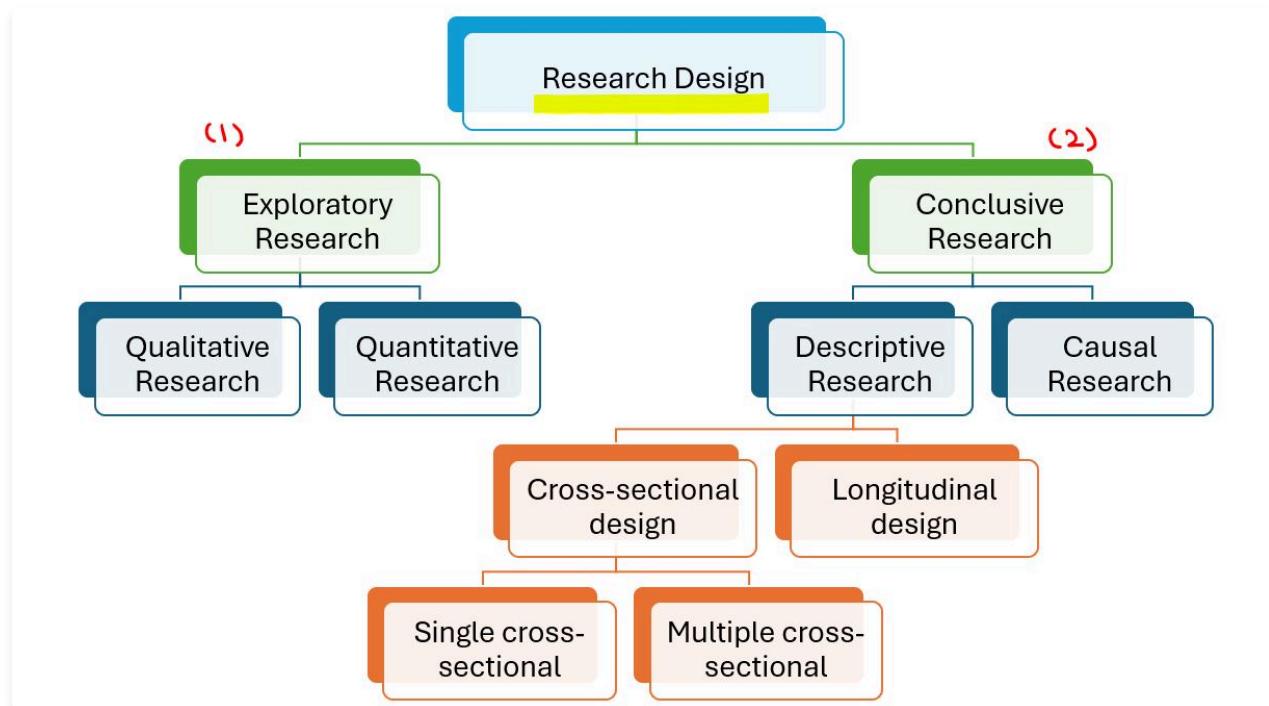
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Question: 1 of 1 questions

Research Design

A research design serves as a blueprint or roadmap for conducting a research project. It outlines the necessary steps and procedures to obtain the information required for addressing research problems effectively. Typically, a research design encompasses the following components or tasks:

1. **Identifying Information Requirements:** Clearly defining the specific information or data needed to address the research questions or objectives.
2. **Determining the Research Approach:** Deciding whether the overall research design will be exploratory, aiming to gain insights and generate hypotheses; descriptive, seeking to portray characteristics and patterns; or causal, aiming to establish cause-and-effect relationships.
3. **Designing Data Collection Techniques:** Planning the sequence of techniques for data collection, which may involve surveys, interviews, observations, experiments, or a combination of these methods.
4. **Developing Data Collection Tools:** Constructing and pre-testing appropriate data collection instruments, such as questionnaires or interview guides, to ensure they are clear, reliable, and valid.
5. **Selecting Sampling Methods:** Specifying the approach for qualitative and/or quantitative sampling, which determines how participants or data points will be selected from the target population. Also, determining the appropriate sample size for the study.
6. **Devising Data Analysis Plan:** Developing a plan for qualitative and/or quantitative data analysis, including the selection of statistical methods or qualitative analysis techniques to derive meaningful insights from the collected data.



A Research Design can be broadly classified as Exploratory or Conclusive Research. The Exploratory research can be further subdivided into Qualitative and Quantitative Research while the Conclusive research can be further subdivided into Descriptive and Causal Research.

The Descriptive Research in itself is a vast area and can be further subdivided into cross- sectional and longitudinal design, where the cross-sectional design can be single or multiple cross- sectional.

1. What is a Research Design? (**UGC NET Dec 2014**)

- The choice between using qualitative or quantitative methods.
- A framework for every stage of the collection and analysis of data.
- The choice between using qualitative or quantitative methods.
- A way of conducting research that is not grounded in theory.

 Check

Question: 1 of 1 questions

Exploratory Research

Exploratory research is a valuable and flexible research design that plays a crucial role in understanding complex phenomena and guiding decision-making processes. Unlike other research designs, exploratory research is characterized by its adaptability, making it well-suited for situations where the subject of study is difficult to measure quantitatively or when existing theories are insufficient.

An example of exploratory research is when a technology company is considering developing a new innovative product but lacks a clear understanding of the target market's preferences and needs. In such a scenario, the company may conduct exploratory research using qualitative methods, such as focus groups or open-ended interviews, to gather insights from potential customers. This research would provide valuable feedback, allowing the company to refine the product concept and make informed decisions about its development.

Another application of exploratory research is *concept testing*, where new ideas or product concepts are evaluated before significant resources are invested in full-scale development. For instance, a fast-food chain considering adding a plant-based burger to its menu might conduct exploratory research through small-scale taste tests and interviews with customers. The qualitative data collected would help the chain assess the initial appeal and potential improvements for the product before committing to its nationwide launch.



Exploratory research can be further divided into qualitative and quantitative designs, each offering distinct advantages in gaining insights and understanding the phenomenon of interest. By combining qualitative and quantitative research approaches, researchers can gain a comprehensive understanding of complex phenomena. The integration of both designs allows for in-depth exploration and precise measurement, leading to better-informed decisions and actionable insights.

1. When a research study is conducted to know about an unknown area and collect information, it is known as: (**U 08 Oct 2022 Evening**)

- Feasibility study
- Explanatory research
- Exploratory research
- Pilot Study

Check

Question: 1 of 1 questions

Conclusive Research

It is a research design characterised by the measurement of clearly defined business phenomena. The objective of conclusive research is to describe specific phenomena, to test specific hypotheses and to examine specific relationships. This requires that the information needed is clearly specified. Conclusive research is typically more formal and structured than exploratory research. It is based on large, representative samples, and the data obtained are subjected to quantitative analysis.

Here are a few examples of conclusive research:

1. A pharmaceutical company conducts a double-blind, placebo-controlled clinical trial to determine the efficacy and safety of a new drug in treating a specific medical condition.
2. A consumer goods company conducts a large-scale survey to assess the market share and consumer preferences for its product compared to competitors in a specific region.
3. An educational institution analyzes standardized test scores and student performance data to determine the impact of a new teaching method on student learning outcomes.

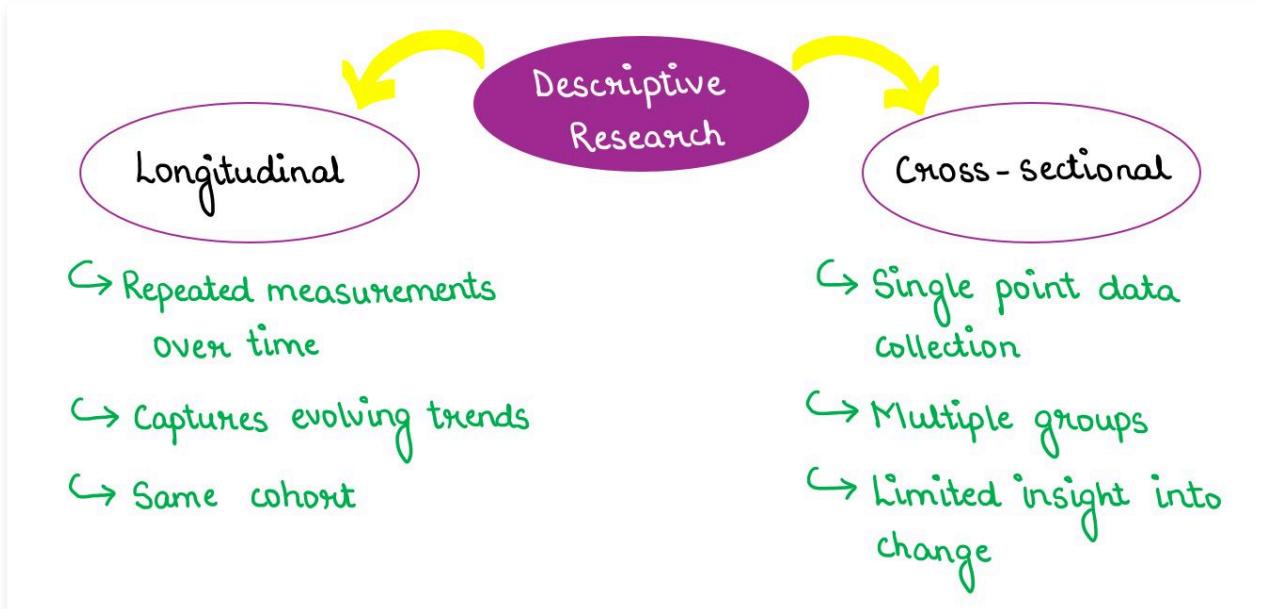
Conclusive research designs may be either descriptive or causal, and descriptive research designs may be either cross-sectional or longitudinal.

Each of these classifications is discussed further.

Conclusive Research

Descriptive research is a conclusive research type with the primary goal of providing a detailed description of a specific subject. Its main objective is to paint a comprehensive picture of characteristics or functions related to the subject. This research approach is well-organized and follows a structured plan, often involving large representative samples. The design of descriptive research outlines the methods used to select information sources and collect data from them.

To illustrate, consider a marketing team conducting a descriptive research study to understand consumer preferences for a new product. They aim to answer questions such as who are the primary consumers, what are the key features that attract them, when and where do they purchase the product, why they choose it over competitors' alternatives, and how they perceive its value. Through this descriptive research, the marketing team gains valuable insights into the target market, enabling them to tailor their strategies effectively and boost sales.



Descriptive research can be further classified into Cross-sectional and Longitudinal research.

1. Cross-sectional design

A type of research design involving the collection of information only once from any given sample of population elements. They may be either single cross-sectional or multiple cross-sectional.

- *Single cross-sectional design* – A cross-sectional design in which one sample of participants is drawn from the target population and information is obtained from this sample only once. A survey conducted to assess the job satisfaction levels of employees in a company at a specific moment in time, is an example of Single cross-sectional design.
- *Multiple cross-sectional design* – A cross-sectional design in which there are two or more samples of participants, and information from each sample is obtained only once.
- A type of multiple cross-sectional design of special interest is cohort analysis. **Cohort analysis** is a multiple cross-sectional design consisting of surveys conducted at appropriate time intervals. The cohort refers to the group of participants who experience the same event within the same time interval. The term 'cohort analysis' refers to any study in which there are measures of some characteristics of one or more cohorts at two or more points in time. For example, a study that tracks the career progression and salary growth of graduates from the same university over the course of 10 years, collecting data at intervals of every two years.

2. Longitudinal design

A type of research design involving a fixed sample of population elements measured repeatedly. The sample remains the same over time, thus providing a series of pictures that, when viewed together, vividly illustrate the situation and the changes that are taking place. A longitudinal study may be done to track the physical and mental health of a group of individuals from childhood to adulthood to understand how lifestyle and environmental factors impact their well-being over time.

A longitudinal design differs from a cross-sectional design in that the sample or samples remain the same over time. In other words, the same people are studied over time. In contrast to the typical cross-sectional design, which gives a snapshot of the variables of interest at a single point in time, a longitudinal study provides a series of 'pictures'.

Often, the term panel is used in conjunction with the term 'longitudinal design'. A **Panel** consists of a sample of participants, generally households, who have agreed to provide general or specific information at set intervals over an extended period. The emphasis of the panel is on measuring facts, e.g., who in the household bought what, where they bought it, when, and other aspects of their behaviour.

1. A study in which a group of participants is observed and measured over a period of time, refers to (**UGC NET 2023 Evening**)

Correlational Research

Archival Research

Cross-sectional Research

Longitudinal Research

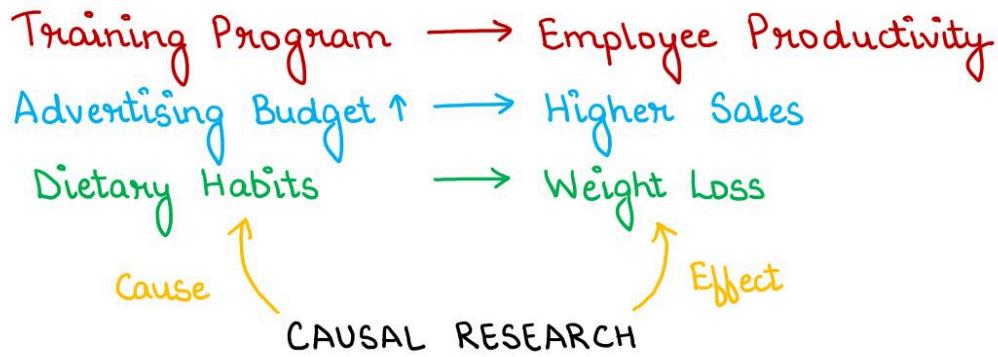
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Question: 1 of 2 questions

Conclusive Research

Causal research is a type of conclusive research that aims to identify and understand cause-and-effect relationships between variables. In causal research, the primary objective is to determine whether changes in one variable (the independent variable) directly influence changes in another variable (the dependent variable).

Unlike descriptive research, which focuses on describing and analyzing phenomena, causal research seeks to establish a cause-and-effect relationship by investigating the impact of one variable on another. It involves conducting experiments or utilizing statistical methods to determine if changes in the independent variable lead to changes in the dependent variable.



Suppose a pharmaceutical company develops a new medication to treat a specific medical condition. To determine whether the new drug is effective and causes an improvement in patients' health, they conduct a causal research study. They randomly assign patients with the medical condition into two groups: one receiving the new drug (experimental group) and the other receiving a placebo (control group). After a specified period, they measure the health outcomes of both groups to assess whether the new drug caused a significant improvement in the patients' condition.

Three Fundamental Conditions

The three fundamental conditions required for making a causal inference or association are as follows:

1. Concomitant Variation

Concomitant variation means that when one variable (X) changes, the other variable (Y) also changes in a systematic way. In other words, there is a correlation between the two variables. For instance, if we observe that an increase in the amount of advertising spending (X) is followed by an increase in product sales (Y), it suggests concomitant variation and a possible causal relationship between advertising and sales.

A study examines the relationship between hours of study (X) and students' test scores (Y). The findings reveal that students who study more tend to achieve higher test scores, indicating concomitant variation between study hours and test scores.

2. Time Order of Occurrence (Temporal Sequence)

This condition emphasizes that the cause (X) must precede or occur simultaneously with the effect (Y). In other words, the cause must happen before the effect takes place. If the effect precedes the cause, it cannot be considered a cause of the effect. Establishing a clear temporal sequence is crucial for identifying causality.

A clinical trial investigates the effect of a new drug (X) on a specific medical condition (Y). The researchers administer the drug before assessing its impact on the condition. By ensuring the temporal sequence, they can better determine whether the drug causes a change in the medical condition.

3. Absence of Other Possible Causal Factors (Nonspurious Association)

This condition states that the observed relationship between the cause (X) and the effect (Y) must not be due to the influence of other variables. In other words, there should be a genuine causal link between X and Y, and not a relationship that can be attributed to a third factor.

A study examines the relationship between ice cream consumption (X) and the number of drowning incidents (Y) at a beach. While there may be a correlation between the two variables, it is not a causal relationship. The common cause is the presence

of more people at the beach, which leads to both higher ice cream sales and an increased risk of drowning. Thus, ice cream consumption is not causing the drowning incidents.

1. Quantitative Research

Quantitative research is a systematic empirical research method that deals mainly with the systematic collection and interpretation of numerical data. It aims to quantify variables, measure phenomena, and analyze relationships between variables through statistical and mathematical techniques.

Characteristics of Quantitative Research



The key characteristics of quantitative research include:

- *Objective*: The primary goal is to test hypotheses and arrive at objective conclusions based on numeric data.
- *Data Collection*: Researchers gather numeric data from a large number of people using methods such as surveys, experiments, observations, or secondary data analysis.
- *Sample Size*: Large sample sizes are used to increase the statistical validity and generalizability of the findings to the population characteristics.
- *Instrumentation*: Standardized instruments like questionnaires or scales are commonly used to collect data.
- *Analysis*: Statistical techniques are applied to analyze the data, including descriptive statistics, inferential statistics, correlations, and regression analysis.
- *Focus*: It lays stress on generalizations to the population characteristics and emphasizes numeric data to focus on objective assessment.
- *Causality*: A major focus in quantitative research is on identifying causal relationships between variables.

Quantitative research, also known as the Structured Approach, is mainly hypothetico-deductive. It focuses on testing hypotheses and establishing cause-and-effect relationships.

Hypothetical-deductive research is a systematic and structured approach to scientific inquiry used to investigate causal relationships between variables and formulate generalizable theories. It involves the development of hypotheses, rigorous testing through empirical observations, and drawing conclusions based on evidence.

Quantitative research methods include the simulation approach, inferential approach, experimental approach, survey research, correlation research, and descriptive research.

1. In quantitative research, providing a basis for more precise estimation of the degree of relationship among or between concepts is the function of (**UGC NET 14 Mar 2023 Evening**)

- Surveying
- Sampling
- Measurement
- Reviewing

 Check

Question: 1 of 2 questions

1. Quantitative Research

Imagine a group of researchers is interested in understanding whether there is a causal relationship between regular exercise and improved heart health. They decide to conduct a hypothetical-deductive research study to investigate this relationship systematically:

1. **Developing a Hypothesis:** The researchers start by formulating a hypothesis based on existing knowledge and theories. In this case, their hypothesis might be: "Regular exercise, when performed at least three times a week for 30 minutes, will lead to a significant improvement in heart health, including reduced blood pressure and lower cholesterol levels."
2. **Designing the Study:** The researchers design a structured study where they recruit two groups of participants: Group A, which will engage in regular exercise as per the defined regimen, and Group B, which will not change their exercise habits (the control group). They carefully control other variables, such as diet and lifestyle, to isolate the impact of exercise.
3. **Collecting Empirical Observations:** Over a period of several months, both groups are closely monitored and subjected to various measurements, including blood pressure readings, cholesterol levels, and overall heart health assessments. The researchers collect empirical data on the participants' health parameters.
4. **Data Analysis and Testing:** After data collection, statistical analyses are performed to compare the two groups. The researchers examine whether there is a statistically significant difference in heart health indicators between the exercise group and the control group. They use established statistical methods to draw meaningful conclusions.
5. **Drawing Conclusions:** Based on the data analysis, the researchers can draw conclusions about the hypothesis. If the exercise group shows a significant improvement in heart health compared to the control group, the researchers may conclude that regular exercise has a causal effect on heart health. If the results do not support the hypothesis, they may reevaluate their initial assumption and refine their theories.

In this example, the researchers follow a hypothetical-deductive approach by developing a hypothesis, conducting a structured study with empirical observations, and drawing conclusions based on the evidence collected. This systematic process allows them to investigate and potentially establish a causal relationship between regular exercise and improved heart health.

1. Arrange the steps in hypothetico-deductive research in the correct sequence: **(UGC NET 24 Sept 2020 Evenin**

- A. Identifying and defining a research problem
- B. Defining the population and drawing a sub-set therefrom
- C. Data collection using appropriate research tasks followed by data analyses
- D. Hypothesis formulation and developing a design of research
- E. Taking a decision on the substantive research hypothesis via testing of the Null hypothesis (H_0)

A, D, B, C, E

A, C, B, D, E

B, A, C, D, E

A, B, C, D, E

Check

Question: 1 of 2 questions

2. Qualitative Research

Qualitative research is an umbrella term that includes various research strategies sharing certain characteristics. It focuses on understanding human experiences, perspectives, and the context of phenomena.

Characteristics of Qualitative Research



The key characteristics of qualitative research include:

- **Objective:** The primary goal is to explore and gain a deeper understanding of a particular situation or phenomenon.
- **Data Collection:** Researchers use methods like interviews, focus groups, ethnography, case studies, or content analysis to gather rich, non-numerical data (i.e., 'soft' data) from a small number of individuals or settings.
- **Sample Size:** Sample sizes for qualitative research vary by technique but are generally small.
- **Analysis:** Qualitative data is analyzed through techniques such as thematic analysis, content analysis, or grounded theory, aiming to develop context-bound generalizations.
- **Focus:** It emphasizes participant perspectives and uses an empirico-inductive approach to explore common experiences, shared culture, and develop a theory.
- **Immersion:** The researcher becomes immersed in the situation, present, or past, to gain a detailed understanding of the central phenomenon.
- **Flexibility:** Qualitative research allows greater flexibility in both methods and the research process.

Qualitative research methods include ethnography, heuristic inquiry, phenomenology, symbolic interactionism, narrative analysis, and grounded theory research.

1. Identify the main features of 'qualitative research' from the following: (UGC NET 20 Nov Evening 2021)

- a. It is concerned with understanding the phenomena from the participant's perspective.
- b. It assumes that there are social facts with a single objective reality.
- c. Researcher becomes immersed in the situation, present or past.
- d. Researcher is detached from the study to avoid bias.
- e. There is greater flexibility in both the methods and research process.

a, c and e only

b, c and d only

a, b and c only

c, d and e only

Check

Question: 1 of 1 questions

3. Comparing Quantitative and Qualitative Research

A comparison of Quantitative and Qualitative Research is given below.

Aspect	Quantitative Research	Qualitative Research
Purpose	Test hypothesis or specific research questions	Discover ideas
Data Collection Approach	Measure and test	Observe and interpret
Data Collection Method	Structured	Unstructured and free form
Researcher's Perspective	Objectivity	Subjectivity
Sample Size	Large samples	Small samples
Research Design	Descriptive and causal research	Exploratory research design

1. Experimental Method

The experimental method is a research design used in scientific studies to investigate cause-and-effect relationships between variables.

It involves manipulating one or more independent variables to observe their impact on a dependent variable while controlling other factors that might influence the results. The experimental method is widely considered one of the most powerful research designs for establishing causal relationships between variables.

Independent Variable → Dependent Variable

CAUSE

EFFECT

Prediction

Response

1. In which method of research an independent variable is manipulated with an intent to observe concomitant changes in dependent variables? (**UGC NET 22 Nov Evening 2021**)

Experimental method

Descriptive survey method

ExPost Facto method

Case study method

Check

Question: 1 of 1 questions

2. Variables

1. { • Response
2. { • Predictor
3. { • Control
4. { • Extraneous
5. { • Confounding
6. { • Blocking
7. { • Antecedent

Types of
Variables

Let us understand various types of variables first:

- **Response Variable (Dependent Variable):** The response variable is the outcome or the effect being measured in a study. It is the variable that researchers are interested in understanding, explaining, or predicting.
- **Predictor Variable (Independent Variable):** The predictor variable is the variable that is hypothesized to influence or predict changes in the response variable. Researchers manipulate or observe this variable to study its effects on the response variable.
- **Control Variable:** The control variable is a variable that is held constant or controlled during an experiment or study to reduce its potential influence on the response variable. By controlling these variables, researchers can isolate the effects of the predictor variable on the response variable.
- **Extraneous Variable:** An extraneous variable is any variable other than the predictor and response variables that may unintentionally influence the study's results. Researchers try to minimize the influence of extraneous variables to ensure the validity of their findings. They produce a spurious or misleading relationship. For example, consider a study examining the relationship between ice cream consumption and drowning incidents. Both variables may show a positive correlation, but the true cause behind this association is an extraneous variable, such as the hot weather, which increases both ice cream consumption and swimming, leading to more drowning incidents.
- **Confounding Variable:** A confounding variable is an extraneous variable that is related to both the predictor and response variables. It affects the results of the study, making it difficult to determine the true relationship between the predictor and response variables. For instance, in a study investigating the relationship between smoking and lung cancer, a confounding variable like age can distort the association. Older individuals are more likely to have both a history of smoking and a higher risk of developing lung cancer. So, the observed relationship between smoking and lung cancer may be inflated by the effect of age, making it difficult to determine the true causal effect of smoking on lung cancer.
- **Blocking Variable:** A blocking variable is used in experimental design to group participants into specific subsets or blocks based on certain characteristics. It helps control for potential sources of variability and ensures that the effects of the predictor variable are not confounded by other factors.
- **Antecedent Variable:** An antecedent variable is a specific type of variable that influences the relationship between the independent and dependent variables. It acts as a mediator or moderator, affecting the strength or direction of the relationship.

Example

Let us consider a study investigating the relationship between study methods and exam scores. The response variable is the exam score (dependent variable), and the predictor variable is the study method used (independent variable). The researcher wants to control for students' prior knowledge and motivation level (control variables) to isolate the effects of study methods. However, the researcher realizes that the students' sleep quality (extraneous variable) may also affect exam scores. To address this, the researcher may group participants based on their sleep quality (blocking variable) to ensure that any differences in exam scores are primarily due to study methods. Moreover, the researcher may find that students' level of interest in the subject (antecedent variable) moderates the relationship between study methods and exam scores, meaning that the effect of study methods on exam scores is stronger or weaker depending on students' interest levels.

By considering all these variables, the researcher can better understand the relationship between study methods and exam scores and ensure the validity of the study's findings.

1. The research method which focuses on establishing causal relationships with controls among variables- independent moderator and dependent, is called (**UGC NET 01 Oct 2020 Morning paper**)

- Survey method
- Ex post facto method
- Case study method
- Experimental method

Check

Question: 1 of 2 questions

3. Process of Experimental Research

Here are the key components and steps involved in the Experimental method of research, illustrated with examples at each stage:

1. **Hypothesis Formation:** Imagine a researcher studying the impact of a new fertilizer on plant growth. Their hypothesis might be: "Plants treated with the new fertilizer will grow taller than those without it."
2. **Experimental and Control Groups:** The researcher divides a group of identical plants into two groups. Group A receives the new fertilizer (experimental group), while Group B does not (control group).
3. **Random Assignment:** To ensure fairness, the researcher uses a random drawing to decide which plants go into Group A and which go into Group B. This minimizes the chance of any inherent differences between the plants affecting the results.
4. **Blocking Variables:** Let's say the researcher is aware that the age of the plants might influence growth. They decide to block the plants into two subgroups based on age, ensuring that both the experimental and control groups have similar age distributions.
5. **Manipulation of Independent Variable:** The researcher applies the new fertilizer to Group A but doesn't change anything for Group B.
6. **Control of Extraneous Variables:** The researcher takes steps to control other factors that might affect plant growth, such as ensuring both groups receive the same amount of sunlight, water, and care.
7. **Covariate Variables:** If there are other factors like soil quality that could affect plant growth, the researcher measures and records these variables to consider them during data analysis.
8. **Data Collection:** Over a defined period, the researcher measures the height of all plants in both groups regularly.
9. **Interaction Effect:** Suppose the researcher also wants to see if the type of soil interacts with the fertilizer's effect. They might find that in sandy soil, the fertilizer has a more significant impact than in clay soil.
10. **Analysis:** After collecting data, statistical analysis is performed to compare the heights of plants in the experimental and control groups. If the experimental group's plants are significantly taller, the researcher can conclude that the new fertilizer had a causal effect on plant growth.

The strength of the experimental method lies in its ability to establish cause-and-effect relationships and isolate the effects of the independent variable on the dependent variable.

1. Creating purpose statements, research questions and hypotheses that are narrow and measurable would mark characteristic features of which research type? (**UGC NET 21 Nov 2021 Morning**)

- Grounded theory research
- Experimental research
- Ethnographic research
- Narrative research

Check

Question: 1 of 2 questions

Ex-post facto Research

Ex-post facto research, also known as "ex post facto" research, is a type of non-experimental research design used in social sciences and other fields. The term "ex post facto" is Latin and means "after the fact" or "retrospectively." In this type of research, the researcher observes and analyzes pre-existing data or situations without directly manipulating variables or conducting experiments. Instead, they examine events or conditions that have already occurred and seek to identify relationships, correlations, or causal factors between variables.

In ex-post facto research, the independent variable is not manipulated by the researcher; instead, it is "selected" based on existing conditions. This means that the researcher does not have control over the variables being studied, but rather, they observe and collect data on variables that have already occurred or are manifesting at the time of the study.

The focus of ex-post facto research is on identifying causal factors based on the available evidence at the present moment. Since the researcher cannot control the variables, they rely on retrospective analysis to understand the relationships between variables and the observed effect on the dependent variable.

For example, a teacher intends to establish the relationship between the educational status of parents and the scholastic achievements of pupils. Here, the teacher would gather data on pupils' academic achievements and their parents' educational status. The independent variable (parents' educational status) is not manipulated but selected from the existing conditions. The researcher aims to determine whether there is any correlation between parental education and students' academic performance.

1. When the independent variable is explored rather than manipulated, to observe the effect on dependent variable method of research is called: **(UGC NET 05 Nov 2020 Morning paper)**

- Descriptive survey method
- Ex-post facto method
- Experimental method
- Case study method

Check

Question: 1 of 1 questions

Historical Research

Historical research is a research method that focuses on studying past events, developments, and occurrences to understand and interpret historical phenomena. It involves gathering and analyzing evidence from various sources, such as documents, artifacts, oral testimonies, and relics, to reconstruct historical events and draw meaningful conclusions about the past.

For example, a historian wants to study the life and achievements of a famous inventor from the 19th century. They gather primary sources such as letters, patents, and newspaper articles from that era, as well as artifacts related to the inventor's work. By critically evaluating and analyzing these sources, the historian reconstructs the inventor's life story and contributions to science and technology during that period.

1. The research which is exploring new facts through the study of the past is called (**UGC NET Dec 2009**)

- Historical research
- Mythological research
- Philosophical research
- Content analysis

 Check

Question: 1 of 1 questions

Participatory Research

Participatory research involves collaboration between researchers and the community or stakeholders being studied. It empowers participants to actively engage in the research process, making them co-researchers and enabling them to influence the research direction and outcomes.

A non-profit organization is conducting participatory research on improving community healthcare. They involve local residents, healthcare workers, and community leaders in the research process. Together, they identify health challenges, prioritize issues, and propose feasible solutions. The community actively participates in data collection, analysis, and decision-making, resulting in a more inclusive and impactful healthcare improvement strategy.

Participatory Action Research

Participatory Action Research (PAR) is a research approach focused on community engagement and action. It encourages active participation of community members in the research process, including problem identification, data collection, analysis, and decision-making. PAR aims to empower communities to address their own issues and concerns, promoting social change and improvement. It emphasizes collaboration between researchers and participants, often resulting in practical, real-world solutions and positive impacts within the community.

1. Participatory research is also described as: **(UGC NET 21 Dec 2018 Morning)**

- Individual-based
- Community-based
- Group-based
- Government-based

Check

Question: 1 of 1 questions

Case Study Research

Case study research is a qualitative research method that involves an in-depth and comprehensive investigation of a particular individual, group, organization, or situation. The primary focus of case study research is to understand the complexities and unique characteristics of the chosen case, providing detailed descriptions and explanations of the phenomenon under study.

Suppose a researcher is interested in understanding the factors that contribute to the success of a specific startup company. The researcher selects a successful startup that has achieved significant growth and recognition in its industry.

The case study research begins by gathering data from various sources, such as interviews with the company's founders, employees, and key stakeholders. The researcher may also review documents, reports, and financial records related to the startup's journey and operations.

Through this data collection process, the researcher gains insights into the naturalistic settings and the meaning-giving processes within the startup. They understand the particularistic details of the startup's strategies, decision-making, and implementation of innovative ideas.

The analysis of the gathered data is inductive, meaning the researcher identifies patterns, themes, and relationships within the information to develop a comprehensive understanding of the factors contributing to the startup's success.

The final case study report provides a descriptive account of the startup's journey, highlighting the key elements that have led to its growth and achievements. While the findings are specific to this particular startup, generalizations may be drawn that could be applicable to other startups in similar industries or contexts.

1. Which of the following are the characteristics of case study research? (**UGC NET 10 Oct 2022 Evening**)

- a. It is simulated in a laboratory.
- b. It is particularistic.
- c. It is descriptive.
- d. It is inductive.
- e. It is disruptive.

b, c and d only

c, d and e only

a, b and c only

a, b and e only

Check

Question: 1 of 1 questions

Evaluative Research

Evaluative research is a type of research that aims to assess the effectiveness, impact, or value of an intervention, program, policy, or action. The primary focus of evaluative research is to determine the extent to which the intervention has achieved its intended outcomes or objectives. This type of research is commonly used in various fields, such as education, healthcare, social services, and public policy, to evaluate the success of initiatives and make data-driven decisions.

A company conducts a training program for its employees to enhance their communication and leadership skills. Before the training, participants' communication abilities and leadership traits are assessed through surveys and performance evaluations. After the training, the same assessments are conducted again to evaluate any improvements.

Evaluative research in this scenario would involve comparing the pre-training and post-training data to determine the extent to which the program has impacted employees' communication and leadership capabilities.

Participant Observation-Based Research

Participant observation-based research is a qualitative research method that involves the active involvement of the researcher in the natural settings of the participants to gain a comprehensive understanding of their perspectives, behaviors, and interactions. The researcher becomes a participant in the social context under study, observing and experiencing the daily operations and social dynamics of the organization or community.

Suppose a researcher is interested in understanding the communication patterns and decision-making processes within a small family-owned restaurant. The researcher decides to use participant observation as the research method. They spend several weeks working as a part-time employee in the restaurant, taking on roles such as a server or a kitchen assistant. By participating in the daily operations, the researcher gains first-hand experiences and observations of how the restaurant functions.

During the participant observation, the researcher closely observes how the staff communicates with each other and with customers, noting their verbal and non-verbal cues. They also witness the decision-making processes, such as menu planning, pricing strategies, and staff scheduling.

1. Data of research take the forms of words or pictures with the researcher as the key instrument in which of the following studies? (**UGC NET 21 Nov Evening 2021**)

- Ex Post Facto Studies
- Experimental Studies
- Descriptive survey Studies
- Participant observation based Studies

Check

Question: 1 of 1 questions

Grounded Theory Research

Grounded theory is a qualitative research approach that involves generating theory through a systematic and simultaneous process of data collection and analysis. This method was developed by Glaser and Strauss in the late 1950s and presented in their influential work 'The Discovery of Grounded Theory' in 1967.

In grounded theory, the researcher takes an inductive approach by posing questions based on information provided by respondents or historical records. The researcher continually questions the data and responses, seeking deeper explanations and patterns. This approach is especially suitable for studying highly dynamic situations characterized by rapid and significant change.

Unlike other research approaches that start with preexisting theories, grounded theory does not begin with a predetermined hypothesis. Instead, it allows theories to emerge organically from the data collected during the research process.

Characteristics of Grounded Theory Research

It is characterized by the following features:

- *Generalizations follow rather than precede the observations:* Grounded theory-based research does not start with preconceived hypotheses or theories. Instead, it follows an inductive approach, where theories and generalizations emerge from the analysis of the collected data. The researcher allows the patterns and themes to emerge naturally from the data.
- *Constant comparison is a tool of this research:* In grounded theory, the researcher continuously compares new data with previously collected data during the analysis. This process of constant comparison helps in identifying similarities, differences, and relationships between data, leading to the development of conceptual categories and theoretical insights.
- *Coding paradigm is extensively used:* Coding is a central aspect of grounded theory-based research. Researchers systematically analyze the data by coding, which involves breaking down the data into smaller units and assigning labels or codes to them. The codes help in categorizing and organizing the data, making it easier to identify patterns and themes.
- *Concepts, Hypotheses, Attributes of a category are products of Grounded theory-based research:* Through the process of constant comparison and coding, grounded theory researchers identify concepts and categories that represent key ideas or themes within the data. These concepts and categories are the building blocks of the emerging theory. Hypotheses may also be generated during the research process as researchers develop tentative explanations for observed patterns.

Imagine a researcher is studying the experiences of individuals who have started their own businesses in a rapidly evolving industry. Using grounded theory, the researcher conducts in-depth interviews with multiple entrepreneurs, collecting data on their challenges, strategies, and successes. Throughout the analysis, the researcher continually asks questions to explore the emerging themes and patterns in the data. From this process, the researcher may develop a theory that highlights the importance of adaptability and innovation in navigating the dynamic industry landscape.

1. Constant comparison is a tool used in: (**UGC NET 05 Dec Morning 2021**)

- Grand theory
- Feministic theory
- Relational theory
- Grounded theory

Check

Question: 1 of 1 questions

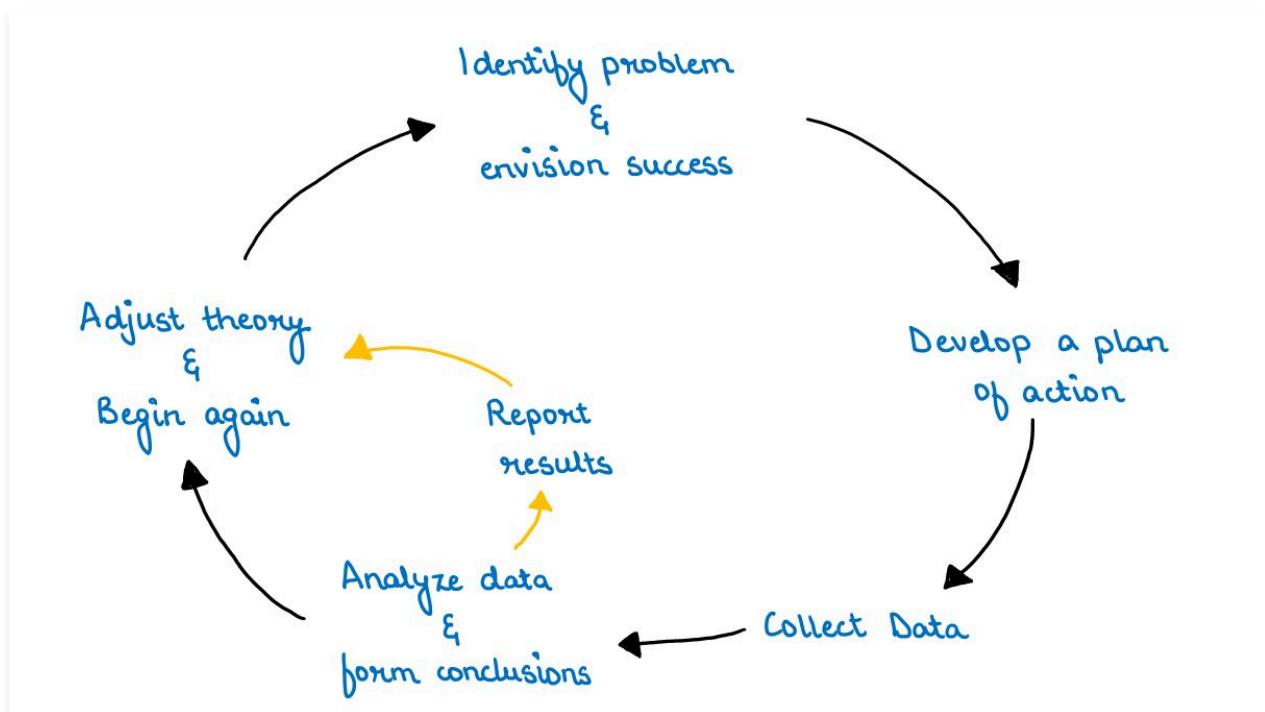
Action Research

Action research is an interactive inquiry process that balances problem-solving actions implemented in a collaborative context with data-driven collaborative analysis or research to understand underlying causes enabling future predictions about personal and organizational change.

Action research can be defined as "an approach in which the action researcher and a client collaborate in the diagnosis of the problem and in the development of a solution based on the diagnosis." Hence, one of the main characteristic traits of action research relates to collaboration between researcher and member of organisation in order to solve organizational problems.

For example, the principal of a school conducts an interview session of teachers and students with a view to explore the possibility of their enhanced participation in school programmes.

Kurt Lewin coined the term 'action research'. In action research, Lewin envisaged a process whereby one could construct a social experiment with the aim of achieving a certain goal. In action research it is believed that the way to 'prove' a theory is to show how it provides an in-depth and thorough understanding of social structures.



Action research is composed of a balance of 3 elements i.e., Research, Participation and Action.

The process of action research is basically in the form of a cycle. The basic steps involve *planning* (the problem, improvement or change that is needed), *acting* (to implement the plan), *observing* (monitoring and evaluating the action effects) and *reflecting* (the outcome of the actions).

1. In which type of research, the steps of research have to be cyclic? (**UGC NET 19 Dec 2018 Morning**)

- Action research
- Grounded theory research
- Experimental research
- Grounded theory research

Check

Ethnographic Research

Ethnographic research is a qualitative research approach that involves studying and understanding human cultures and social behaviors through direct observation and immersion in the natural settings of the participants. The primary aim of ethnographic research is to describe and interpret the customs, habits, and differences of a particular group or culture, gaining insights into their perspectives and experiences from an insider's viewpoint.

Suppose a researcher is interested in understanding the communication patterns and social dynamics within a remote indigenous community in a particular region. The researcher decides to conduct an ethnographic study by immersing themselves in the community for an extended period.

They participate in daily activities, such as gathering for meals, attending community events, and engaging in conversations with community members. They observe how communication occurs within the community, both verbally and non-verbally, and document the rituals and traditions that shape their social interactions.

Through the *participant-observation process*, the researcher gains insights into the underlying cultural norms that govern communication, conflict resolution, and decision-making within the community. They also learn about the significance of storytelling and oral traditions in passing down cultural knowledge from one generation to another.

Netnography

One related concept is Netnography. Netnography is an adaptation of ethnography that analyses the free behaviour of individuals in online environments. Observing online communities can be much faster, simpler and less expensive than traditional ethnography. It is also unelicited, so more natural and unobtrusive than surveys and interviews. Netnography can refer to the passive process of following conversations and interactions on the internet at the individual level.

1. In ethnographic research, the researcher involves himself in a _____ over a period of time. (**UGC NET 02 May Morning**)

- financial transaction
- social setting
- philosophical discourse
- political campaign

Check

Question: 1 of 1 questions

Scientific Research

The scientific method of research is a systematic approach used to conduct scientific investigations. It involves making observations, formulating hypotheses, designing experiments, collecting data, analyzing results, and drawing conclusions based on evidence. The method ensures objectivity, accuracy, and reliability in the research process and is used across various scientific disciplines to advance knowledge about the natural world.

Empirico-Inductive Research

Empirico-inductive research is a type of scientific research that relies on empirical observations and inductive reasoning to develop generalizations or theories. In this approach, researchers gather data from real-world observations and experiences and use it to generate hypotheses or general principles. The process involves making inferences and drawing conclusions based on the patterns and trends observed in the collected data.

Empirico-inductive research uses inductive reasoning, which involves moving from specific observations to broader generalizations or theories. The researcher identifies patterns, trends, or regularities in the data and then formulates hypotheses or general principles based on these observations.

For example, a researcher is interested in understanding the factors that influence customer satisfaction in a retail store. The researcher conducts observations and interviews with customers and store staff, asking about their experiences and perceptions.

Through the data collection process, the researcher identifies several recurring themes. For example, customers consistently mention that the friendliness and helpfulness of the staff positively impact their satisfaction. Additionally, they note that the store's organization and cleanliness play a role in their overall experience. Based on these empirical observations, the researcher formulates a hypothesis: "Customers' satisfaction in the retail store is influenced by the friendliness of staff and the store's organization and cleanliness."

The researcher can then further test this hypothesis through additional data collection and analysis to strengthen the evidence for the proposed relationship between these factors and customer satisfaction.

Overall, empirico-inductive research allows researchers to explore and derive insights from real-world data, leading to the formulation of hypotheses and generalizations based on observed patterns and trends. It is a valuable approach in generating new knowledge and understanding of various phenomena.

1. Data

Data are the facts and figures collected, analyzed, and summarized for presentation and interpretation. All the data collected in a particular study are referred to as the data set for the study. In statistics, data is the most important thing for any study. Data are the distinct factual pieces of the information. The data is considered as a plain fact. It is also called as the raw data, from which the statistics are extracted.

The data set is comprised of Elements, Variables and Observations.

Elements are the entities, based on which the data is collected. Elements are very important feature of the data. **Variables** are the characteristics of interest for the corresponding elements. A quantity whose value changes across the population and can be measured is called variable. For instance, consider a sample of employed individuals. The variables for this set of the population can be industry, location, gender, age, skills, job-type, etc. The value of the variables will differ with each employee. **Observations** are the set of measurements that are collected for a specific element.

We will understand this with the help of an example.

	Teacher	Doctor	Painter
Weekly	5	8	2
Monthly	150	100	80
Annually	1800	2000	800

In the above table:

Elements: Teacher, Doctor, Painter

Variables: Weekly, Monthly, and Annual earning

Observations: 5, 150, 180, 8, 100, 2000, 2, 80, 800

Types of Variables

There are three types of variables.

Univariate (one-variable) data sets have just one piece of information recorded for each item. For univariate data, you can identify a typical summary value and get an indication of diversity, as well as note any special features or problems with the data.

Bivariate (two-variable) data sets have exactly two pieces of information recorded for each item. For bivariate data, in addition to looking at each variable as a univariate data set, you can study the relationship between the two variables and predict one variable from the other.

Multivariate (many-variable) data sets have three or more pieces of information recorded for each item. Also with multivariate data, you can look at each variable individually, as well as examine the relationship among the variables and predict one variable from the others.

1. Given below are two statements: (UGC NET 11 July 2022 Evening)

Statement I: Multivariate studies demand larger samples than univariate studies.

Statement II: Multivariate studies do not analyse the data sets involving several responses.

Both Statement I and Statement II are true.

Statement I is false but Statement II is true.

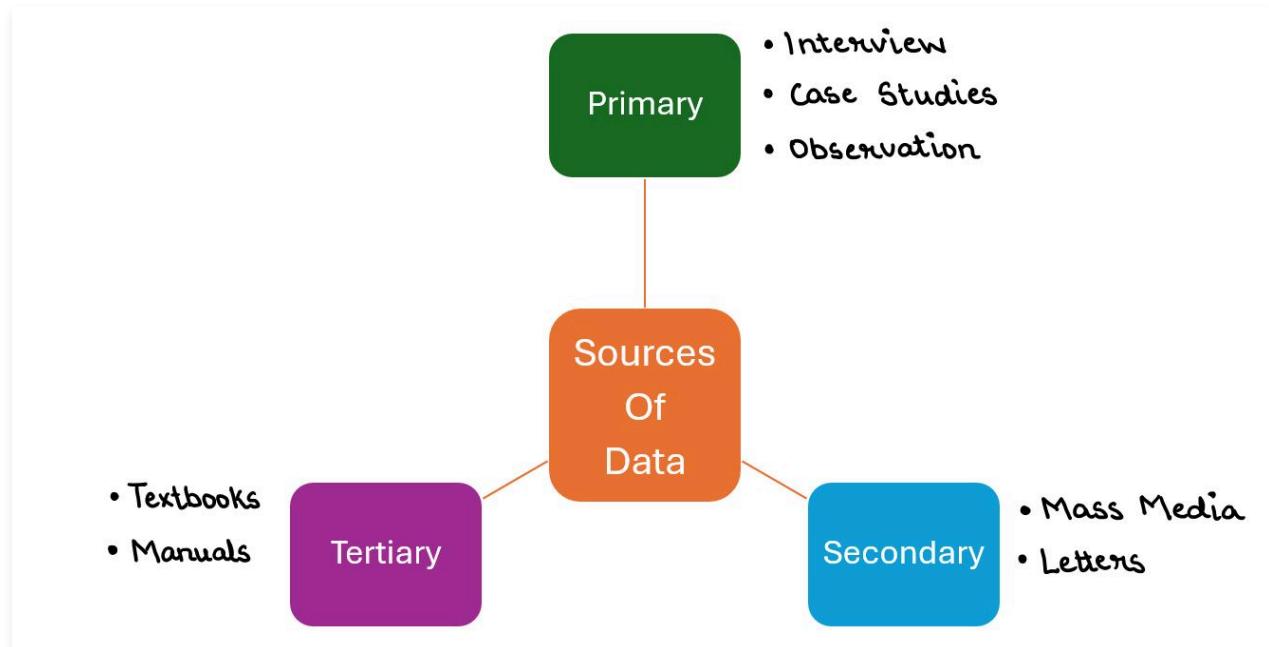
Both Statement I and Statement II are false.

Statement I is true but Statement II is false.

Check

Question: 1 of 1 questions

2. Sources of Data



Data collection methods are used for collection of data for social research. While deciding about the method of data collection to be used for the study the research should be well acquainted with types of data: Primary and Secondary.

The **primary data** are those which are collected a fresh and for the first time and thus happens to be original in character. The **secondary data** are those sort of data that researcher would be using for the study and accordingly he will have to select one or the other method of data collection.

Primary data is the data collected by the researcher themselves, i.e.

- Interview
- Observation
- Action research
- Case studies
- Life histories
- Questionnaires
- Ethnographic research
- Longitudinal studies

Secondary sources are data that already exists and is sourced from some place, that has originally collected it.

- Previous research
Official statistics
- Mass media products
Diaries
- Letters
- Government reports
- Web information
- Historical data and information

The combination of qualitative and quantitative and primary and secondary research is known as **triangulation** or methodological pluralism.

Tertiary sources of information are based on a collection of primary and secondary sources. Examples of tertiary sources include:

- textbooks (sometimes considered as secondary sources)
- dictionaries and encyclopedias
- manuals, guidebooks, directories, almanacs

- indexes and bibliographies
-

3. Types of Data

Categorical and Quantitative Data

Data can be classified as either categorical or quantitative. Data that can be grouped by specific categories are referred to as **categorical data**. Categorical data use either the nominal or ordinal scale of measurement. Data that use numeric values to indicate how much or how many are referred to as **quantitative data**. Quantitative data are obtained using either the interval or ratio scale of measurement.

Categorical variables take category or label values and place an individual into one of several groups. Each observation can be placed in only one category, and the categories are mutually exclusive. For example, gender is a categorical variable having two categories (male and female) and there is no intrinsic ordering to the categories. Hair color is also a categorical variable having a number of categories (black, blonde, brown, brunette, red, etc.)

Quantitative variables take numerical values and represent some kind of measurement. Examples of quantitative variables are height, number of items sold by a departmental store etc.

Cross-Sectional and Time Series Data

Cross-sectional data are observations that come from different individuals or groups at a single point in time. If one considers the closing prices of a group of 20 different insurance stocks on 20 December 2023, this would be an example of cross-sectional data. Note that the underlying population should consist of members with similar characteristics.

Time-series data is a set of observations collected at usually discrete and equally spaced time intervals. The daily closing price of a certain stock recorded over the last six weeks is an example of time-series data.

Discrete and Continuous Data

A **discrete quantitative variable** can assume values only from a list of specific numbers (such as 0 or 1, or the list 0, 1, 2, 3,..., for example). Any quantitative variable that is not discrete is, for our purposes, continuous. A continuous quantity is not restricted to a simple list of possible values.

Discrete Data can only take only certain values. These values do not have to be complete numbers, but they are values that are fixed. It only contains finite values, the subdivision of which is not possible. It includes only those values which are separate and can only be counted in whole numbers or integers, which means that the data cannot be split into fractions or decimals. Examples are the number of students in a class, the number of chocolates in a bag, the number of strings on the guitar, the number of fishes in the aquarium, etc.

Continuous Data is the data that can be of any value. Over time, some continuous data can change. It may take any numeric value, within a potential value range of finite or infinite. The continuous data can be broken down into fractions and decimals, i.e. according to measurement accuracy, it can be significantly subdivided into smaller sections. Examples are Measurement of height and weight of a student, Daily temperature measurement of a place, Wind speed measured daily, etc.

Quantitative and Qualitative Data

Quantitative data quantify characteristics, measuring their magnitude. For example, a person's age, the price of a product, or a family's income are instances of quantitative data.

Qualitative data describe qualities or attributes. Characteristics like a person's sex, color, or a student's intelligence fall under qualitative data.

4. Data Collection

The role of data collection in the research process is crucial as it lays the foundation for gathering information to address research questions or hypotheses. It involves systematically collecting and recording data to analyze and draw conclusions. Effective data collection ensures accuracy, reliability, and validity in research outcomes.

Observation

Observation involves systematically watching and recording phenomena, behaviors, or events without directly influencing them. It can be structured or unstructured, aiding in understanding natural behaviors in their real context.

Survey and Questionnaire

Surveys and questionnaires employ structured sets of questions to gather information from a sample population. They allow for standardized data collection on a larger scale, collecting opinions, preferences, or behaviors.

Interviews

Interviews involve direct interaction between the researcher and participants to gather in-depth information. They can be structured (with predefined questions) or unstructured (allowing for flexibility), providing detailed insights into participant perspectives.

Focus Group

Focus groups bring together a small, diverse group of individuals to discuss specific topics guided by a moderator. They facilitate open discussions, enabling researchers to explore attitudes, perceptions, and opinions.

Experiments

Experiments involve controlled conditions to study cause-and-effect relationships. Researchers manipulate variables to observe their impact, aiming for precise and controlled data collection.

Case Study

Case studies involve an in-depth investigation of a single individual, group, or event. They provide detailed and comprehensive insights into specific contexts, behaviors, or phenomena.

Secondary Data Collection

Secondary data collection involves using existing data sources like journals, reports, or databases. Researchers analyze and interpret this pre-existing information for their research purposes, offering a broader perspective or historical context.

Each data collection method has its strengths and limitations, making it essential for researchers to select the most appropriate method(s) aligned with their research goals, ethical considerations, and the nature of the study to gather reliable and valid data.

5. Data Preparation

Data preparation is a crucial phase in the research process. It involves converting raw data collected from various sources into a format suitable for analysis. The process ensures that the data is clean, accurate, and organized for meaningful interpretation. The main steps in data preparation include data coding, data entry, handling missing values, and data transformation.

Let's break down these steps in detail, with examples for each:

1. Data Coding: It is the process of converting qualitative data (such as text responses) into a numeric or machine-readable format for analysis. This step ensures that the data can be processed by statistical tools.

Example: Imagine a survey question asking respondents to rate their satisfaction on a scale of "very dissatisfied" to "very satisfied."

- "Very dissatisfied" might be coded as 1,
- "Dissatisfied" as 2,
- "Neutral" as 3,
- "Satisfied" as 4,
- "Very satisfied" as 5.

Similarly, categorical data such as "Gender" can be coded as:

- 1 for Male
- 2 for Female

Creating a codebook helps guide the coding process, detailing how each variable should be handled.

2. Data Entry: Once data is coded, it needs to be entered into a system that can process it for analysis. This can be done using spreadsheets, databases, or statistical software like SPSS or SAS.

Example: After coding survey responses on customer satisfaction, the data can be entered into Excel as rows for each respondent and columns for the different questions and their responses. For larger datasets, it might be better to use a database that can handle millions of rows and complex data structures.

During data entry, it's essential to check for accuracy and ensure no errors are made. Spot-checking entries and validating data as it's inputted helps minimize mistakes.

3. Handling Missing Values: Missing data is inevitable in any research. Not all respondents will answer all questions, or the data may be missing for other reasons. Handling missing data appropriately is essential for maintaining the integrity of the analysis.

Example: If a respondent skips a question about income in a survey, you may choose to handle the missing data in two common ways:

- Listwise Deletion: Removing the entire response if even one item is missing.
- Imputation: Estimating missing values based on the available data. For instance, if a respondent missed one question but answered others in the same category, you might replace the missing value with the average response of the same category.

Statistical software like SPSS offers methods like Multiple Imputation or Maximum Likelihood Procedures to handle missing values without introducing significant bias.

4. Data Transformation: Sometimes, the data needs to be transformed to make it easier to analyze or to standardize it. This step could include re-scaling, aggregating, or creating new variables based on the existing ones.

Example: If a survey asks about income on a scale from 1,000 to 10,000, but you want to group the responses into broader categories, you can collapse the data into income ranges:

- 1-3K = Low
- 4-6K = Medium
- 7-10K = High

Similarly, if some items are reverse coded (e.g., negative items in a satisfaction scale), they may need to be reversed before analysis. For example, if a "strongly agree" is coded as 1, the reverse of "strongly disagree" will need to be adjusted.

6. Data Reduction and Classification

Let us discuss concepts of data reduction and data classification.

1. Data Reduction: Data reduction refers to the process of simplifying and condensing raw data into manageable and relevant pieces while maintaining its core meaning. It is one of the key steps in qualitative research as it helps researchers sift through large amounts of information, identify patterns, and focus on the most pertinent details related to the research questions.

Purpose: To organize and reduce the overwhelming data into smaller, meaningful units without losing essential information. It helps researchers make sense of complex data by cutting out irrelevant or extraneous details.

Example: In a study of employee satisfaction, a researcher may have hundreds of interview transcripts. Through data reduction, they may identify recurring themes such as "job satisfaction," "workplace relationships," and "career development," and reduce the complexity by focusing on these themes.

2. Classification: Classification involves grouping or categorizing the reduced data into different categories or themes. Once the data is simplified, researchers organize the information into predefined or emergent categories that represent the central concepts or patterns within the data.

Purpose: To organize the data systematically so that themes can be identified and analyzed, allowing for deeper insights.

Example: Continuing with the employee satisfaction study, the researcher may classify the reduced data into categories like "job security," "work-life balance," and "compensation." These categories then form the basis for further analysis and interpretation.

7. Focus Group

A focus group, facilitated by a trained moderator, fosters open discussion among a small group of participants in an unstructured manner. The moderator guides the conversation, setting its direction, posing questions, and managing the flow of dialogue.

The primary aim of a focus group is to gather insights within a relaxed and comfortable setting, allowing participants to freely express their thoughts, emotions, and behaviors using their own language and pace. Typically consisting of 6-10 members, these sessions can last anywhere from 1 to 6 hours.

The moderator's role is pivotal, establishing a connection with participants, maintaining the conversation's momentum, and employing probing techniques to delve deeper into participants' perspectives. **Probing** involves motivating participants to elaborate, clarify, or expand on their responses.

Moreover, the moderator often plays a central part in analyzing and interpreting the collected data. Hence, they require expertise, experience, familiarity with the topic, and an understanding of group dynamics.

To guide discussions, focus group researchers utilize a discussion guide, which outlines the session's purpose, rules, and specific topics or questions to explore. Essentially, the guide acts as a blueprint for the focus group.

Some organizations have adopted an ongoing form of a focus group known as a "Focus Blog," employing an internet blog platform to collect qualitative data through participant comments in an informal manner.

Brainstorming is vital part of Focus Group discussions where participants freely share numerous ideas without immediate judgment. The focus is on generating creative thoughts, combining and expanding on others' ideas, fostering a creative atmosphere, and allowing unique connections to emerge, leading to innovative concepts that might not have surfaced otherwise.

1. Given below are two statements: (**UGC NET 01st Mar 2023 Evening**)

Statement I: In Focus group discussions, the moderator is supposed to provide a liberal climate for participants to

Statement II: Participants of focus group discussions should rant individual experiences for comparison.

- Both Statement I and Statement II are false.
- Statement I is false but Statement II is true.
- Statement I is true but Statement II is false.
- Both Statement I and Statement II are true.

 Check

Question: 1 of 1 questions

Let us now discuss some of advantages and disadvantages of focus group technique.

7. Focus Group

Advantages of Focus Groups

Focus groups provide several advantages over other data-collection methods, summarized by the 10 Ss:

- (i) **Synergy:** Group interaction yields a wider array of insights and ideas compared to private responses.
- (ii) **Snowballing:** One person's comment can ignite a chain reaction of creative idea generation and critical examination.
- (iii) **Stimulation:** Participants express ideas and feelings with increased excitement as the discussion progresses.
- (iv) **Security:** Similar feelings among participants encourage openness and comfort in sharing thoughts.
- (v) **Spontaneity:** Participants' spontaneous and unconventional responses provide accurate views.
- (vi) **Serendipity:** Group dynamics facilitate unexpected idea exploration and discussions.
- (vii) **Specialization:** Skilled interviewers manage multi-member participation effectively.
- (viii) **Scientific scrutiny:** Sessions allow close observation and recording for transparent analysis by multiple individuals.
- (ix) **Structure:** Discussions adapt to participants' perspectives, fostering flexibility and comfort.
- (x) **Speed:** Simultaneous interviews speed up data collection, further enhanced by online focus groups.

Additionally, focus groups foster unique thoughts through participant interaction, allowing for the stimulation of increasingly creative insights.

Disadvantages of Focus Groups

Challenges in focus groups can be summarized by the 5 Ms:

- (i) **Misjudgment:** Results may be susceptible to moderator and researcher bias.
 - (ii) **Moderation:** Group dynamics can be challenging to manage, impacting discussions.
 - (iii) **Messiness:** Unstructured responses complicate coding, analysis, and interpretation.
 - (iv) **Misrepresentation:** Generalizing findings beyond specific target groups may mislead.
 - (v) **Meeting:** Recruiting and coordinating participants pose logistical challenges, partly resolved by the growth of online focus groups.
-

8. Observation

Observation involves systematically recording real-time behavioral patterns of people, objects, and occurrences. It captures a wide range of behaviors but cannot delve into cognitive aspects like attitudes or motivations. Consequently, it doesn't explain why a behavior occurs or its underlying intentions.

Observation methods vary, including unobtrusive, visible, and hidden types. **Unobtrusive** observation occurs discreetly without the subject's awareness, while **visible** observation acknowledges the observer's presence. **Hidden** observation occurs without the subject's knowledge.

Researchers using observational methods may personally witness events or utilize tracking systems such as checkout scanners or internet activity records. For instance, these systems can track a consumer's purchase behavior regarding discounts or monitor website browsing habits.

Observation is a versatile tool, suitable for both qualitative and quantitative research. It can be part of exploratory, descriptive, or even causal research designs, providing valuable insights into behavioral patterns.

1. When a respondent is aware of being measured then its effect on his behaviour is identified as: (**UGC NET 05 , Evening 2022**)

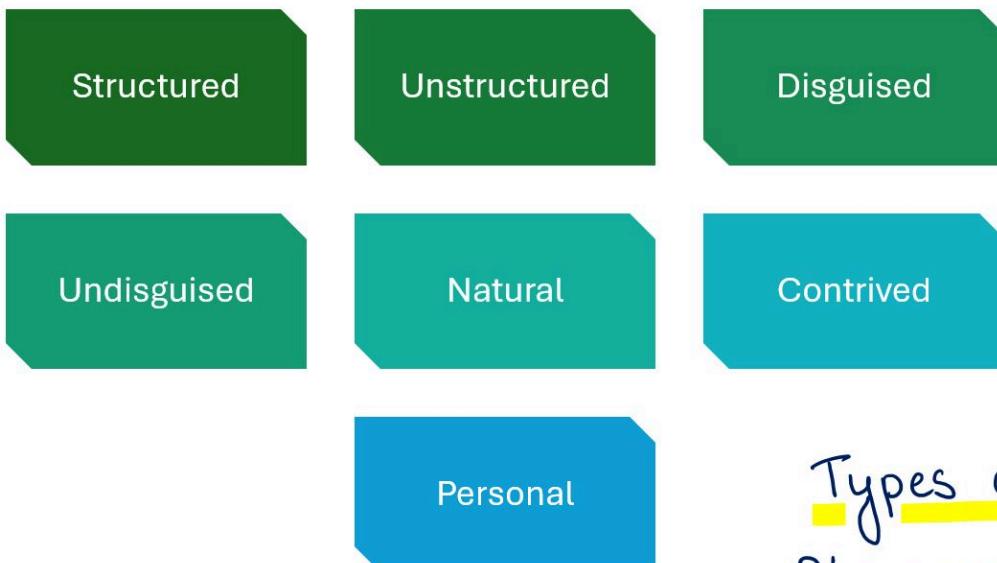
- Reactivity
- Self — consciousness
- Artificiality
- Identity effect

Check

Question: 1 of 1 questions

Let us discuss various types of observation, next.

8. Observation



Observation techniques encompass various methods, each serving distinct research needs and contexts. Here's a breakdown:

Structured Observation: Researchers define behaviors and measurement techniques, reducing bias and enhancing data reliability. For instance, counting the number of times specific gestures occur during a classroom presentation.

Unstructured Observation: Monitoring various phenomena without precise formulation, allowing flexibility in identifying key components. For instance, observing children playing to explore their preferred activities before forming hypotheses.

Disguised Observation: Participants remain unaware of being observed to ensure natural behavior. Mystery shoppers, disguised as customers, evaluate service quality without the staff's knowledge.

Undisguised or Passive Observation: Participants are aware of being observed, either by direct communication or obvious recording. Researchers debate its impact on behavior.

Natural/Direct Observation: Observing behavior in its natural setting without creating artificial scenarios. For example, observing customers trying new menu items in a restaurant.

Contrived Observation: Studying behavior in an artificial environment like a lab setting. For instance, measuring physiological responses to an advertisement screened in a controlled classroom environment.

Personal Observation: Researchers record real-time behavior without attempting to influence it. For example, tracking shopper entry times and movements within a store without intervention.

Electronic observation

In electronic observation, electronic devices rather than human observers record the phenomenon being observed. Various techniques involved in electronic observation are listed below.

Television and radio monitoring: AC Nielsen devised a television monitoring system that provides for estimating national television audiences. Nielsen Media Research uses a consumer panel and a monitoring device called a PeopleMeter to obtain ratings for television programs nationwide. The PeopleMeter gathers data on what each television in a household is playing and who is watching it at the time.

Click-through rate (CTR): It is the percentage of people who are exposed to an advertisement who actually click on the corresponding hyperlink which takes them to the company's website. In other words, it is the ratio of users who click on a specific link to the number of total users who view a page, email, or advertisement. It is commonly used to measure the success of an online advertising campaign for a particular website as well as the effectiveness of email campaigns.

Scanner based computer panel: It is a type of consumer panel in which participants' purchasing habits are recorded with a laser scanner rather than keeping a purchase diary.

Neurological devices: These help the researcher to actually directly observe what is going on in the mind of a respondent as they perform an activity. These devices are of various types, such as:

- *Eye-tracking monitor* – It is a mechanical device used to observe eye movements. Some eye monitors use infrared light beams to measure unconscious eye movements.
- *Pupilometer* – It is a mechanical device used to observe and record changes in the diameter of a subject's pupils.
- *Psychogalvanometer* – It is a device that measures galvanic skin response, a measure of involuntary changes in the electrical resistance of the skin.
- *Voice-pitch analysis* – It is a physiological measurement technique that records abnormal frequencies in the voice that are supposed to reflect emotional reactions to various stimuli.

To choose among the device alternatives available, response latency is used as a measure. *Response latency* is the time taken to by the participant to respond to the question.

9. Surveys and Questionnaire

Surveys serve as structured tools to gather information from a wide population, employing standardized questions for collecting data. They are distributed through various channels like online platforms, emails, or phone calls, covering diverse topics and primarily useful for quantitative data collection.

A survey, defined as a method of collecting primary data, communicates with a representative sample of individuals, providing a snapshot of a particular time. This type of survey relies on respondents' answers presumed to represent the larger target population.

Survey participation involves direct engagement by research respondents, either through questionnaires or interacting with interviewers, making it obtrusive compared to unobtrusive methods where subjects are unaware of data collection, as seen in disguised observation.

Surveys can be conducted with or without an administrator/interviewer. For instance, placing questionnaires in stores/malls or using mail or fax where respondents read and answer questions independently, termed self-administered questionnaires.

The survey method uses structured questionnaires administered to a sample of the target population, inquiring about behavior, intentions, attitudes, awareness, motivations, demographics, and lifestyle through verbal, written, or digital means. The 'structured' aspect implies standardized data collection via a formal questionnaire with questions asked in a predetermined sequence, making the project's purpose evident to participants. This structured direct survey, involving questionnaire administration, stands as the most common data-collection method.

1. A researcher is interested in studying the prospects of a particular political party in an area. What tool should he use for the study? (**UGC NET Dec 2015**)

- Interview
- Schedule
- Questionnaire
- Rating scale

Check

Question: 1 of 1 questions

9. Surveys and Questionnaire

A questionnaire is a tool containing a series of written questions intended to gather information or opinions from respondents. It can function within a survey or be distributed independently to collect specific information. Questionnaires follow a standardized format and enable quantitative data analysis.

MindWriter personal computers offer you ease of use and maintenance. When you need service, we want you to rely on **CompleteCare**, wherever you may be. That's why we're asking you to take a moment to tell us how well we've served you.

MindWriter

Please answer the first set of questions using the following scale:

Met Few Expectations 1	Met Some Expectations 2	Met Most Expectations 3	Met All Expectations 4	Exceeded Expectations 5		
		1	2	3	4	5

1. Telephone assistance with your problem:

a. Responsiveness

b. Technical competence

2. The courier service's effectiveness:

a. Arrangements

b. Pickup speed

c. Delivery speed

3. Speed of the overall repair process

4. Resolution of the problem that prompted service/repair

5. Condition of your MindWriter on arrival

6. Overall impression of CompleteCare's effectiveness

How likely would you be to ...

Very Unlikely	Somewhat Unlikely	Neither Unlikely nor Likely	Somewhat Likely	Very Likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Use CompleteCare on another occasion

8. Repurchase another MindWriter based on:

a. Service/repair experience

b. Product Performance

Please share any additional comments or suggestions

How may we contact you to follow up on any problems you have experienced?

Last Name First Name Email
City State Zipcode Phone
 Service Code

Thank you for your participation.

Questionnaire Design Process

The process of designing a questionnaire is built upon the generation of information that effectively aids decision makers. The following are the steps involved in crafting a questionnaire:

1. Defining the Required Information

The initial stage of questionnaire design involves specifying the necessary information. This aligns with the initial phase of research design. It's beneficial to review the research problem components, approach, particularly research questions, hypotheses, and factors influencing research design.

2. Determining the Interview Method

The choice of interview method significantly influences questionnaire design and question content. *Self-administered surveys* like online and postal questionnaires require straightforward questions and clear instructions. In contrast, *face-to-face interviews* allow for complex and varied questions, while telephone interviews restrict questions to be brief and simple.

3. Crafting Individual Question Content

This phase involves addressing various considerations such as:

- Is the question essential?
- Could multiple questions be necessary instead of one?

Once necessity is established, ensuring questions are sufficient to gather desired information is vital. Multiple questions may be required at times for unambiguous data collection. *Double-barrelled question* is a single question that attempts to cover two issues. Such questions can be confusing to respondents and result in ambiguous responses.

4. Addressing Participants' Limitations and Willingness to Respond

Certain factors limit participants' ability to provide information, including lack of information, memory issues, or inability to articulate certain responses. Considerations include:

- Is the participant informed? (Filter questions can screen uninformed participants.)
- Can the participant recall? (Errors like *omission* (the inability to recall an event that actually took place), *telescoping* (when an individual telescopes or compresses time by remembering an event as occurring more recently than it actually occurred), and *creation* (when a participant 'remembers' an event that did not actually occur) may occur.)
- Can the participant articulate their thoughts and feelings?
- What level of effort is required from participants?
- Are participants willing to share sensitive information?

5. Selecting Question Structure

Questions can be unstructured or structured:

- *Unstructured questions* are open-ended, allowing participants to respond in their own words.
- *Structured questions* specify response alternatives and format, such as multiple-choice, dichotomous (yes/no), or scales.

Several guidelines can be employed to create an effective questionnaire:

- Incorporate counterbiasing statements, which serve as introductory remarks to potentially sensitive questions, reducing reluctance among respondents by suggesting that certain behaviors are common.
- Implement filter questions, which screen out respondents who are not qualified to answer a subsequent question.
- Utilize pivot questions, a form of filter question, to gather information like income or other sensitive data that respondents might be hesitant to provide.
- Employ the split ballot technique, which involves presenting two alternative phrasings of the same question to different halves of the sample, yielding a more accurate overall response compared to a single phrasing.

6. Choosing Question Wording

Question wording translates the desired content and structure into understandable terms for participants. Poorly worded questions can lead to refusal or inaccurate responses. Guidelines include defining the issue, using clear and ordinary words, avoiding implicit assumptions, and steering clear of leading or loaded questions.

A leading question is one that clues the participant to what answer is desired or leads the participant to answer in a certain way. Some participants have a tendency to agree with whatever way the question is leading them to answer. This tendency is known as yea-saying and results in a bias called acquiescence bias. A loaded question suggests a socially desirable answer or is emotionally charged.

7. Sequencing Questions Appropriately

Question order is as crucial as wording. Factors to consider:

- Opening questions should be engaging and simple.
- Sequence typically follows basic information, classification, and identification data.
- Difficult or sensitive questions are better placed later.
- Transition from general to specific questions is recommended.
- Logical order is essential, and branching questions should be well-structured.

8. Determining Form and Layout

Formatting, spacing, and positioning of questions impact results, especially in self-administered surveys. Numbering questions aids in coding responses, and pre-coding is useful for postal surveys. Pre-coding involves assigning a code to every conceivable response before data collection.

9. Preparing the Questionnaire for Publication

Guidelines for questionnaire publication include making it visually appealing, placing instructions near questions, considering booklet formats for longer surveys, and using pre-coded questionnaires when applicable.

10. Quality Assurance via Pilot Testing

Pilot testing is essential for identifying and resolving potential issues in the questionnaire. Focus on testing all aspects, analyzing pilot-test data, and ensuring that participants in the pilot-test mirror the actual survey population.

9. Surveys and Questionnaire

While evaluating the quality of a survey, the researcher must estimate its accuracy. There are different types of error that can take place during a survey. These are similar to the error types that can occur in any research design or experimental methods.

1. Random Sampling Error

Most surveys try to portray a representative cross-section of a particular target population. Even with technically proper random probability samples, however, statistical errors will occur because of chance variation in the elements selected for the sample. Such errors are called as random sampling errors.

2. Non Sampling/ systematic error

These result from some imperfect aspect of the research design or from a mistake in the execution of the research. These errors include all sources of error other than those introduced by the random sampling procedure.

Non Sampling Errors can further be categorized into Respondent Error and Administrative Errors.

A *non-response error* arises when some of the respondents included in the sample do not respond. The primary causes of non-response are refusals and not-at-homes. Non-response will cause the net or resulting sample to be different in size or composition from the original sample. Non-response error is defined as the variation between the true mean value of the variable in the original sample and the true mean value in the net sample.

Response error arises when respondents give inaccurate answers or their answers are mis-recorded or mis-analysed. Response error is defined as the variation between the true mean value of the variable in the net sample and the observed mean value obtained in the research project. Response errors can be made by researchers, interviewers or respondents.

Errors made by Researcher

Errors made by the researcher include:

- *Surrogate information error* may be defined as the variation between the information needed for the research problem and the information sought by the researcher. For example, instead of obtaining information on consumer choice of a new brand, the researcher obtains information on consumer preferences because the choice process cannot be easily observed.
- *Measurement error* may be defined as the variation between the information sought and information generated by the measurement process employed by the researcher. While seeking to measure consumer preferences, the researcher employs a scale that measures perceptions rather than preferences.
- *Population definition error* may be defined as the variation between the actual population relevant to the problem at hand and the population as defined by the researcher.
- *Sampling frame error* may be defined as the variation between the population defined by the researcher and the population as implied by the sampling frame (list) used. For example, the telephone directory used to generate a list of telephone numbers does not accurately represent the population of potential consumers due to unlisted, disconnected and new numbers in service.
- *Data analysis error* encompasses errors that occur while raw data from questionnaires are transformed into research findings. For example, an inappropriate statistical procedure is used, resulting in incorrect interpretation and findings.
- The *experimenter effect* refers to unintentional bias or influence exerted by the researcher on the participants or the experiment's outcome due to their actions, expectations, or mannerisms.

Response errors made by Interviewer

Response errors made by the interviewer include respondent selection, questioning, recording and cheating errors.

- *Respondent selection error* occurs when interviewers select respondents other than those specified by the sampling design or in a manner inconsistent with the sampling design. For example, in a readership survey, a non-reader is selected for the interview but classified as a reader of The Times of India in the 19–25 year-old category in order to meet a difficult quota requirement.
- *Questioning error* denotes errors made in asking questions of the respondents or in not probing, when more information is needed. For example, while asking questions an interviewer does not use the exact wording given in the questionnaire.
- *Recording error* arises due to errors in hearing, interpreting and recording the answers given by the respondents. For example, a respondent indicates a neutral response (undecided) but the interviewer misinterprets that to mean a positive response (would buy the new brand).
- *Cheating error* arises when the interviewer fabricates answers to a part or the whole of the interview. For example, an interviewer does not ask the sensitive questions related to a respondent's debt but later fills in the answers based on personal

assessment.

Response errors made by Respondent

Response errors made by the respondent comprise inability and unwillingness errors.

- *Inability error* results from the respondent's inability to provide accurate answers. Respondents may provide inaccurate answers because of unfamiliarity, fatigue, boredom, faulty recall, question format, question content and other factors. For example, a respondent cannot recall the brand of toothpaste purchased four weeks ago.
- *Unwillingness error* arises from the respondent's unwillingness to provide accurate information. Respondents may intentionally misreport their answers because of a desire to provide socially acceptable answers, to avoid embarrassment, or to please the interviewer. For example, to impress the interviewer, a respondent intentionally says that they read The Economist magazine.
- *Self-consciousness effect* refers to a situation where a person's awareness of being observed or studied alters their behavior or responses. This phenomenon influences how individuals act or react in a given situation due to their self-awareness, potentially leading to modified or distorted behavior, especially in research or observational settings.

Other Errors

Some of other key terms are:

- *Voluntary response bias*: the sampling bias that often occurs when the sample is volunteers.
 - *Self-interest study*: bias that can occur when the researchers have an interest in the outcome.
 - *Perceived lack of anonymity*: when the responder fears giving an honest answer might negatively affect them.
 - *Loaded questions*: when the question wording influences the responses.
 - *Satisficing*: Satisficing occurs when respondents use a suboptimal amount of cognitive effort to answer questions. Instead, satisficers will typically pick what they consider to be the first acceptable response alternative.
 - *Acquiescence Bias*: When presented with agree/disagree, yes/no, or true/false statements, some respondents are more likely to concur with the statement independent of its substance.
 - *Social Desirability*: Social desirability occurs when respondents answer questions in a manner they feel will be positively perceived by others.
 - *Response Order Bias*: Response order bias is the tendency to select the items toward the beginning (i.e., primacy effect) or the end (i.e., recency effect) of an answer list or scale.
 - *Question Order Bias*: Order effects also apply to the order of the questions in surveys. Each question in a survey has the potential to bias each subsequent question by priming respondents.
-

10. Case Study

The case study method is a meticulous and in-depth approach to gathering and analyzing data within a specific context or situation. It involves an extensive examination of a particular instance, event, or individual, aiming to understand its complexities, dynamics, and outcomes. This method offers a comprehensive exploration of real-life scenarios, providing rich and detailed insights into various facets such as behavior, interactions, processes, and outcomes.

Researchers employ diverse sources of information, including interviews, observations, documents, and archival records, to construct a holistic view of the case under study. By delving deeply into a single case or a small number of cases, the case study method allows for a nuanced understanding of complex phenomena. It enables researchers to explore unique circumstances, uncover patterns, and generate detailed narratives, contributing significantly to both qualitative and quantitative research by offering in-depth contextual understanding and often serving as a basis for theory development or hypothesis testing. The case study method is prevalent in various fields, from psychology and sociology to business management and education, owing to its ability to provide rich, context-specific insights.

For instance, in psychology, a case study might focus on an individual's unique experience with a particular therapy approach, offering detailed accounts of their progress, challenges faced, and outcomes achieved. Researchers would collect data through interviews, observations, and analysis of relevant documents or records to create a detailed narrative of the individual's therapeutic journey.

Similarly, in business management, a case study could revolve around examining the success factors behind a company's innovative marketing strategy. Researchers might gather data by conducting interviews with key stakeholders, analyzing financial reports, and reviewing marketing campaigns to uncover the factors contributing to the strategy's effectiveness. Through this comprehensive analysis, the case study method offers valuable insights into the complexities and nuances of business decisions and their impact on success.

1. In which of the following research methods the emphasis is laid on naturalistic settings and meaning-giving pro
(UGC NET 22 Dec 2018 Evening)

- Ex post facto method
- Case study method
- Experimental method
- Experimental method

Check

Question: 1 of 1 questions

11. Interview Method

The interview method of data collection involves direct interaction between the researcher and the participant(s). This technique allows for a conversational approach to gather information, insights, or opinions from individuals or groups. Interviews can be conducted face-to-face, over the phone, or through video calls, depending on the accessibility and preferences of the participants.

This method is more suitable under following circumstances.

- It is suitable when researchers aim to collect detailed and in-depth information, understand nuances, and explore complex issues from the participant's viewpoint.
- Useful for qualitative research that focuses on understanding motives, attitudes, perceptions, or experiences.
- When exploring topics where flexible questioning and probing are necessary to extract comprehensive information.

Few examples are:

Market Research: When a company wants to understand consumer preferences for a new product, they might conduct interviews to delve into individuals' preferences, needs, and opinions.

Academic Research: An anthropologist conducting fieldwork might use interviews to gather personal narratives and cultural insights from community members.

1. Which of the following are the criteria of a successful interviewer? (**UGC NET 05 Mar 2023 Morning**)

- A. Ethical
- B. Open Minded
- C. Gentle and Sensitive
- D. Balanced
- E. Rigid and Harsh in comments.

B, C, D, E only

A, B, D, E only

A, C, D, E only

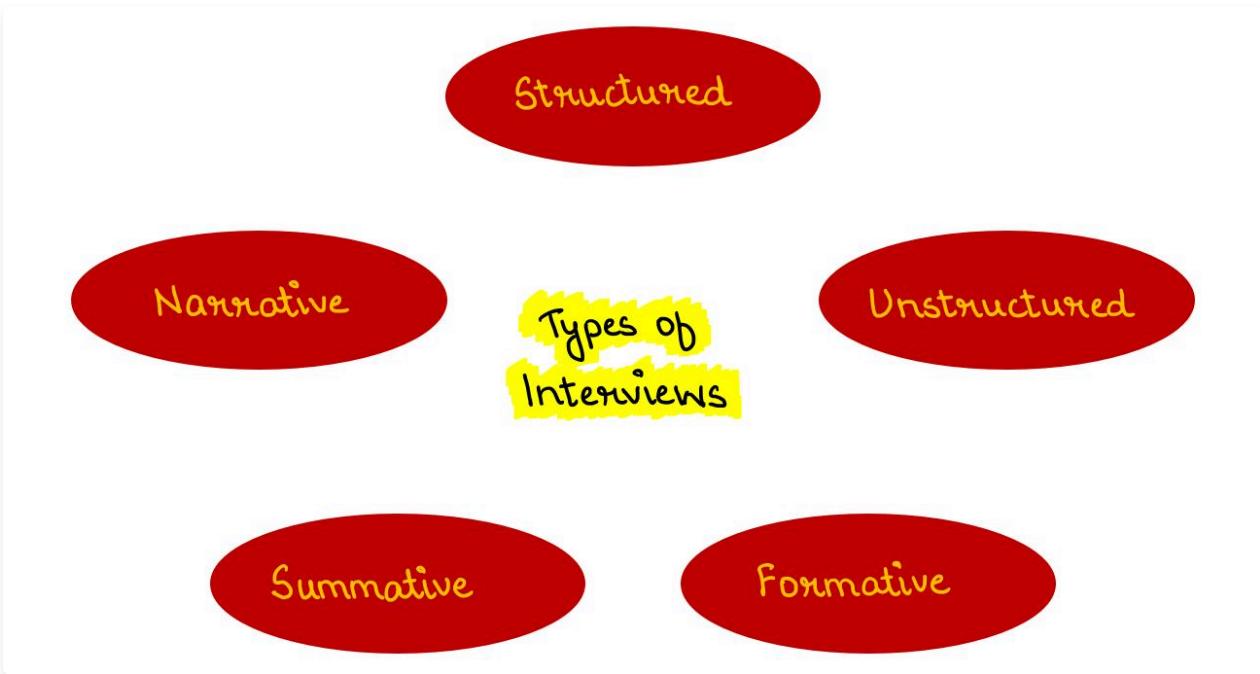
A, B, C, D only

Check

Question: 1 of 1 questions

Let us now discuss some of types of interviews.

11. Interview Method



Some of interview types are listed below:

Structured Interview

This type follows a set format of predetermined questions, often with fixed response options. It aims to maintain consistency across interviews, making data analysis more straightforward and enabling comparisons between participants.

Example: In a customer satisfaction survey, all participants are asked the same list of questions regarding their experience with a product, such as rating the product's quality on a scale from 1 to 10.

Unstructured Interview

This form is open-ended, allowing flexibility in questioning and encouraging respondents to share detailed, personal experiences. The questions aren't predetermined, offering a more conversational and exploratory approach.

Example: In a research study exploring people's experiences with chronic illness, participants are asked to describe how their condition has affected their daily lives without specific guiding questions.

Formative Interview

These interviews happen in the early stages of research to refine the research approach or instrument (like a questionnaire). Researchers might conduct formative interviews to test questions' clarity or relevance before the main study.

Example: Before launching a survey on workplace satisfaction, researchers conduct formative interviews to test the clarity and relevance of the survey questions among a small group of employees.

Summative Interview

These occur after the main data collection to summarize or conclude findings. They might aim to clarify specific points or gather additional insights that emerged from the primary data.

Example: Following a large-scale survey on dietary habits, researchers conduct follow-up interviews with select participants to delve deeper into the reasons behind specific eating habits revealed in the survey data.

Narrative Interview

This type seeks to gather stories or life experiences from participants. It allows individuals to share their narratives without strict guidance, emphasizing the storytelling aspect and aiming to understand experiences within the broader context of their lives.

Example: In a psychological study on resilience, researchers conduct narrative interviews with survivors of natural disasters, allowing them to narrate their experiences, coping mechanisms, and personal growth following the traumatic event.

1. When a fixed list of questions is administered to all the participants in the same order, it is known as (**UGC NET 2023 Morning**)

- Formative interview
- Structured interview
- Summative interview
- Fixed question interview

 Check

Question: 1 of 1 questions

12. Attitude scaling

Attitude scaling involves evaluating an individual's attitudinal inclination by representing it with a numerical value on a scale, depicting a spectrum from highly favorable to extremely unfavorable sentiments. Scaling refers to the "method of assigning numbers (or other symbols) to a characteristic of objects to imbue those properties with numerical qualities." In practice, numbers are allocated to indicators of object properties. For example, the measurement of temperature employs a thermometer, where mercury expands or contracts to indicate temperature variations. Likewise, assessing one's attitude towards their university can involve multiple scales capturing diverse facets of their awareness, emotions, or behavioral inclinations related to the institution.

Type	Restrictions	Scale Items	Data Type
Rating Scales			
Simple Category Scale	Needs mutually exclusive choices.	One or more	Nominal
Multiple Choice Single-Response Scale	Needs mutually exclusive choices; may use exhaustive list or "other."	Many	Nominal
Multiple Choice Multiple-Response Scale (checklist)	Needs mutually exclusive choices; needs exhaustive list or "other."	Many	Nominal
Likert Scale	Needs definitive positive or negative statements with which to agree/disagree.	One or more	Interval
Likert-type Scale	Needs definitive positive or negative statements with which to agree/disagree.	One or more	Ordinal or interval
Semantic Differential Scale	Needs words that are opposites to anchor the graphic space.	One or more	Interval
Numerical Scale	Needs concepts with standardized or defined meanings; needs numbers to anchor the end-points or points along the scale; score is a measurement of graphical space from one anchor.	One or many	Ordinal or interval
Multiple Rating List Scale	Needs words that are opposites to anchor the end-points on the verbal scale.	Up to 10	Ordinal or interval
Fixed (Constant) Sum Scale	Participant needs ability to calculate total to some fixed number, often 100.	Two or more	Ratio
Stapel Scale	Needs verbal labels that are operationally defined or standard.	One or more	Ordinal or interval
Graphic Rating Scale	Needs visual images that can be interpreted as positive or negative anchors; score is a measurement of graphical space from one anchor.	One or more	Ordinal, interval, or ratio
Ranking Scales			
Paired Comparison Scale	Number is controlled by participant's stamina and interest.	Up to 10	Ordinal
Forced Ranking Scale	Needs mutually exclusive choices.	Up to 10	Ordinal
Comparative Scale	Can use verbal or graphical scale.	Up to 10	Ordinal

Types of Scaling

Measurement scales fall into one of four general types: rating, ranking, categorization, and sorting.

A **rating scale** is used when participants score an object or indicant without making a direct comparison to another object or attitude. For example, they may be asked to evaluate the styling of a new automobile on a 7-point rating scale.

Ranking scales constrain the study participant to making comparisons and determining order among two or more properties (or their indicants) or objects. Participants may be asked to choose which one of a pair of cars has more attractive styling.

A **choice scale** requires that participants choose one alternative over another. They could also be asked to rank-order the importance of comfort, ergonomics, performance, and price for the target vehicle. Categorization asks participants to put themselves or property indicants in groups or categories. Asking auto show attendees to identify their gender or ethnic

background or to indicate whether a particular prototype design would appeal to a youthful or mature driver would require a category response strategy.

Sorting requires that participants sort cards (representing concepts or constructs) into piles using criteria established by the researcher. The cards might contain photos or images or verbal statements of product features such as various descriptors of the car's performance.

Let us discuss various types of scales, which are used in questionnaire design.

12. Attitude scaling

Simple Category Scale
(dichotomous)
data: nominal

"I plan to purchase a MindWriter laptop in the next 12 months."
 Yes
 No

**Multiple-Choice,
Single-Response Scale**
data: nominal

"What newspaper do you read most often for financial news?"
 East City Gazette
 West City Tribune
 Regional newspaper
 National newspaper
 Other (specify: _____)

**Multiple-Choice,
Multiple-Response
Scale (checklist)**
data: nominal

"Check any of the sources you consulted when designing your new home:"
 Online planning services
 Magazines
 Independent contractor/builder
 Developer's models/plans
 Designer
 Architect
 Other (specify: _____)

Simple Attitude Scales manifest in 3 distinct types:

Dichotomous Scale (Simple Category Scale)

The dichotomous scale provides a choice between two exclusive responses, such as "yes" and "no," or other contrasting categories like "important" and "unimportant," suitable for scenarios requiring a straightforward dichotomous answer, often seen in demographic inquiries. For instance, in a survey asking about satisfaction with a product, respondents might choose either "satisfied" or "unsatisfied." This scale is ideal for straightforward, binary inquiries.

Single-Response Multiple-Choice Scale

In situations where respondents have multiple options but are expected to select only one answer, the single-response multiple-choice scale fits best. This scale usually offers primary alternatives covering the majority of the range, occasionally complemented by an "other" category. Both this scale and the dichotomous scale yield nominal data. Imagine a survey inquiring about preferred genres of music. Respondents are prompted to select one genre from options like rock, pop, jazz, or classical.

Multiple-Response Multiple-Choice Scale (Checklist)

Another variant, the multiple-response multiple-choice scale (also known as a checklist), permits respondents to select one or more alternatives. While advantageous for capturing a comprehensive overview of participant choices, it can pose challenges in reporting, particularly if research sponsors anticipate responses to sum up to 100 percent. This scale also generates nominal data. Consider a survey asking respondents about the types of exercises they engage in regularly. Participants can select all options that apply, such as jogging, weightlifting, yoga, or swimming.

12. Attitude scaling

The Likert scale, developed by Rensis Likert, is the most frequently used variation of the summated rating scale. Summated rating scales consist of statements that express either a favorable or an unfavorable attitude toward the object of interest. The participant is asked to agree or disagree with each statement. Each response is given a numerical score to reflect its degree of attitudinal favorability, and the scores may be summed to measure the participant's overall attitude.

The scale produces interval data.

**Likert Scale
Summated Rating**
data: interval

"The Internet is superior to traditional libraries for comprehensive searches."

STRONGLY AGREE (5)	NEITHER AGREE NOR DISAGREE (4)	(3)	DISAGREE (2)	STRONGLY DISAGREE (1)
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Originally, creating a Likert scale involved a procedure known as **item analysis**. In the first step, a large number of statements were collected that met two criteria: (1) Each statement was relevant to the attitude being studied; (2) each was believed to reflect a favorable or unfavorable position on that attitude.

People similar to those who are going to be studied were asked to read each statement and to state the level of their agreement with it, using a 5-point scale. A scale value of 1 indicated a strongly unfavorable attitude (strongly disagree). The other intensities were 2 (disagree), 3 (neither agree nor disagree), 4 (agree), and 5 (strongly agree), a strongly favorable attitude.

To ensure consistent results, the assigned numerical values are reversed if the statement is worded negatively (1 is always strongly unfavorable and 5 is always strongly favorable). Each person's responses are then added to secure a total score. The next step is to array these total scores and select some portion representing the highest and lowest total scores (generally defined as the top and bottom 10 to 25 percent of the distribution). The middle group (50 to 80 percent of participants) are excluded from the subsequent analysis.

The two extreme groups represent people with the most favorable and least favorable attitudes toward the attitude being studied. These extremes are the two criterion groups by which individual items are evaluated. Item analysis assesses each item based on how well it discriminates between those persons whose total score is high and those whose total score is low. It involves calculating the mean scores for each scale item among the low scorers and high scorers.

1. The easiest attitudinal scale which is a summated rating scale is the: **(UGC NET 25 June 2020 Morning paper)**

- Guttman Scale
- Thurstone Scale
- MLA Scale
- Likert Scale

Check

Question: 1 of 1 questions

12. Attitude scaling

The Thurstone Scale, known as an **equal-appearing interval scale**, differs from the Likert scale in its approach. In a Thurstone Scale, each item in a set isn't considered equal; instead, items are scaled along the attitude being measured. Each item is assigned a specific scale value indicating the strength of attitude for an agreement response to that item. These items are arranged in a way that indicates different levels of agreement, rather than being viewed as equal in their attitude or value.

Constructing a Thurstone Scale tends to be more challenging compared to the Likert or summated scale, yet both methods generally yield similar outcomes. Respondents select the items they agree with, and each chosen item corresponds to a certain number of points (scale value). The points for each item are added up and then divided by the number of answered items, yielding an average score for each respondent. A higher score indicates a more favorable attitude.

The Likert scale was born out of the Thurstone scale four years after the invention of the latter. The aim of developing the Likert scale was to simplify the complex Thurstone scale and ensure that it is more reliable.

The major differences between the two scales are that while the Thurstone scale has a complex scoring system, and time-consuming developing format, the Likert scale is simplified, and has less development time. Also, unlike the Thurstone scale that requires the intervention of intermediary judges, which can be often biased and unreliable, the Likert scale doesn't require interventions and is rather more reliable.

12. Attitude scaling

The Semantic Differential (SD), developed by Osgood, Suci, and Tannenbaum in 1957, serves as an attitude scale focusing on the evaluative domain and the affective dimension.

Semantic Differential Scale
data: interval

Lands' End Catalog

FAST ____ : ____ : ____ : ____ : ____ : ____ : SLOW
HIGH QUALITY ____ : ____ : ____ : ____ : ____ : ____ : LOW QUALITY

The semantic differential scale measures the psychological meanings of an attitude object using bipolar adjectives. Researchers use this scale for studies such as brand and institutional image. The method consists of a set of bipolar rating scales, usually with 7 points, by which one or more participants rate one or more concepts on each scale item. The SD scale is based on the proposition that an object can have several dimensions of connotative meaning. The meanings are located in multidimensional property space, called semantic space. Connotative meanings are suggested or implied meanings, in addition to the explicit meaning of an object.

It functions in two key ways: first, measuring the semantic properties of words and concepts, and second, evaluating attitudes. Respondents are prompted to rate an object, like "school" or "supervisor," across a series of opposing adjectives using a seven-point scale to denote the intensity and direction of their feelings toward that object.

This method, analyzed through factor analysis, identifies three main factors of meaning: evaluative, potency, and activity.

Around 15 to 20 pairs of bipolar adjectives are chosen based on the study's focus on these dimensions. The Semantic Differential efficiently generates substantial data with minimal effort, capturing variances among concepts, scales, and subjects for analysis. For instance, participants rate their perception or feelings towards a supervisor by marking an "X" along the seven-point scale.

The semantic differential has several advantages. It is an efficient and easy way to secure attitudes from a large sample. These attitudes may be measured in both direction and intensity. The total set of responses provides a comprehensive picture of the meaning of an object and a measure of the person doing the rating. It is a standardized technique that is easily repeated but escapes many problems of response distortion found with more direct methods.

It produces interval data.

12. Attitude scaling

Numerical scales have equal intervals that separate their numeric scale points. The verbal anchors serve as the labels for the extreme points. Numerical scales are often 5-point scales but may have 7 or 10 points. The participants write a number from the scale next to each item. If numerous questions about a product's performance were included in the example, the scale would provide both an absolute measure of importance and a relative measure (ranking) of the various items rated. The scale's linearity, simplicity, and production of ordinal or interval data make it popular for managers and researchers.

Numerical Scale
data: ordinal or*
interval

EXTREMELY FAVORABLE	5	4	3	2	1	EXTREMELY UNFAVORABLE
Employee's cooperation in teams _____						
Employee's knowledge of task _____						
Employee's planning effectiveness _____						

**Multiple Rating
List Scale**
data: ordinal or
interval

"Please indicate how important or unimportant each service characteristic is":							
	IMPORTANT				UNIMPORTANT		
Fast, reliable repair	7	6	5	4	3	2	1
Service at my location	7	6	5	4	3	2	1
Maintenance by manufacturer	7	6	5	4	3	2	1
Knowledgeable technicians	7	6	5	4	3	2	1
Notification of upgrades	7	6	5	4	3	2	1
Service contract after warranty	7	6	5	4	3	2	1

A multiple rating list scale is similar to the numerical scale but differs in two ways:

- (i) It accepts a circled response from the rater, and
- (ii) the layout facilitates visualization of the results.

The advantage is that a mental map of the participant's evaluations is evident to both the rater and the researcher.

This scale produces interval data.

12. Attitude scaling

The Stapel scale is used as an alternative to the semantic differential, especially when it is difficult to find bipolar adjectives that match the investigative question. In the figure, there are three attributes of corporate image. The scale is composed of the word (or phrase) identifying the image dimension and a set of 10 response categories for each of the three attributes.

Stapel Scale
data: ordinal or*
interval

(Company Name)		
	+5	+5
	+4	+4
	+3	+3
	+2	+2
	+1	+1
Technology Leader	Exciting Products	World-Class Reputation
-1	-1	-1
-2	-2	-2
-3	-3	-3
-4	-4	-4
-5	-5	-5

Fewer response categories are sometimes used. Participants select a plus number for the characteristic that describes the attitude object. The more accurate the description, the larger is the positive number. Similarly, the less accurate the description, the larger is the negative number chosen. Ratings range from 15 to 25, with participants selecting a number that describes the store very accurately to very inaccurately..

Like the Likert, SD, and numerical scales, Stapel scales usually produce interval data.

12. Attitude scaling

A scale that helps the researcher discover proportions is the constant-sum scale. With a constant-sum scale, the participant allocates points to more than one attribute or property indicant, such that they total a constant sum, usually 100 or 10. In the restaurant example, the participant distributes 100 points among four categories:

Constant-Sum Scale
data: ratio

"Taking all the supplier characteristics we've just discussed and now considering cost, what is their relative importance to you (dividing 100 units between)":

Being one of the lowest-cost suppliers

All other aspects of supplier performance

Sum 100

Indicate the relative importance of each attribute:

- Food Quality
- Atmosphere
- Service
- Price

TOTAL is 100.

Up to 10 categories may be used, but both participant precision and patience suffer when too many stimuli are proportioned and summed. A participant's ability to add is also taxed in some situations; thus, this is not a response strategy that can be effectively used with children or the uneducated. The advantage of the scale is its compatibility with percent (100 percent) and the fact that alternatives that are perceived to be equal can be so scored—unlike the case with most ranking scales.

The scale is used to record attitudes, behavior, and behavioral intent.

The constant-sum scale produces interval data.

12. Attitude scaling

In ranking scales, the participant directly compares two or more objects and makes choices among them. Frequently, the participant is asked to select one as the "best" or the "most preferred." When there are only two choices, this approach is satisfactory, but it often results in ties when more than two choices are found.

Paired-Comparison Scale
data: ordinal

"For each pair of two-seat sports cars listed, place a check beside the one you would most prefer if you had to choose between the two."

- | | |
|---|---|
| <input type="checkbox"/> BMW Z4 M Coupe | <input type="checkbox"/> Chevrolet Corvette Z06 |
| <input type="checkbox"/> Porsche Cayman S | <input type="checkbox"/> Porsche Cayman S |
| <input type="checkbox"/> Chevrolet Corvette Z06 | <input type="checkbox"/> Porsche Cayman S |
| <input type="checkbox"/> BMW Z4 M Coupe | <input type="checkbox"/> Dodge Viper SRT10 |
| <input type="checkbox"/> Chevrolet Corvette Z06 | <input type="checkbox"/> Dodge Viper SRT10 |
| <input type="checkbox"/> Dodge Viper SRT10 | <input type="checkbox"/> BMW Z4 M Coupe |

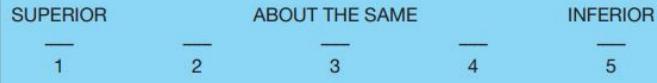
Forced Ranking Scale
data: ordinal

"Rank the radar detection features in your order of preference. Place the number 1 next to the most preferred, 2 by the second choice, and so forth."

- User programming
- Cordless capability
- Small size
- Long-range warning
- Minimal false alarms

Comparative Scale
data: ordinal

"Compared to your previous hair dryer's performance, the new one is":



Using the **paired-comparison scale**, the participant can express attitudes unambiguously by choosing between two objects. The number of judgments required in a paired comparison is $[(n)(n-1)/2]$, where n is the number of stimuli or objects to be judged. When four cars are evaluated, the participant evaluates six paired comparisons.

The **forced ranking scale**, lists attributes that are ranked relative to each other. This method is faster than paired comparisons and is usually easier and more motivating to the participant. With five items, it takes 10 paired comparisons to complete the task, and the simple forced ranking of five is easier. Also, ranking has no transitivity problem where A is preferred to B, and B to C, but C is preferred to A—although it also forces a false unidimensionality.

Often the researcher is interested in benchmarking. This calls for a standard by which other programs, processes, brands, point-of-sale promotions, or people can be compared. The **comparative scale** is ideal for such comparisons if the participants are familiar with the standard.

12. Attitude scaling

Q-sorts require sorting of a deck of cards into piles that represent points along a continuum. The participant (or judge) groups the cards based on his or her response to the concept written on the card.

What magazines do you want Singapore Airlines to carry for its in-flight service?

Most Preferred												Least Preferred	
10	9	8	7	6	5	4	3	2	1	0		(scale value)	
3	4	7	10	13	16	13	10	7	4	3		(number of cards per pile)	

Researchers using Q-sort resolve three special problems: item selection, structured or unstructured choices in sorting, and data analysis. The basic Q-sort procedure involves the selection of a set of verbal statements, phrases, single words, or photos related to the concept being studied.

After the cards are created, they are shuffled, and the participant is instructed to sort the cards into a set of piles (usually 7 to 11), each pile representing a point on the judgment continuum. The left-most pile represents the concept statements, which are "most valuable," "favorable," "agreeable," and so forth. The right-most pile contains the least favorable cards. The researcher asks the participant to fill the center, or neutral, pile with the cards about which the participant is indecisive.

In the case of a structured sort, the distribution of cards allowed in each pile is predetermined. With an unstructured sort, only the number of piles will be determined.

The purpose of sorting is to get a conceptual representation of the sorter's attitude toward the attitude object and to compare the relationships between people. The relative ranking of concepts allows researchers to derive clusters of individuals possessing similar preferences. By researchers varying the instructions, the technique can be used to describe products, services, behavioral intentions, and a host of other applications.

In the example below, participants are asked to complete a structured sort of cards containing the names of magazines.

12. Attitude scaling

The Guttman Scale, known as a cumulative scale, is constructed around a small group of homogeneous items, all measuring a single attitude, event, or phenomenon.

Item					
2	4	1	3		Participant Score
X	X	X	X		4
—	X	X	X		3
—	—	X	X		2
—	—	—	X		1
—	—	—	—		0

*X = agree; — = disagree.

Total scores on cumulative scales have the same meaning. Given a person's total score, it is possible to estimate which items were answered positively and negatively. A pioneering scale of this type was the scalogram. Scalogram analysis (Guttman Scale) is a procedure for determining whether a set of items forms a unidimensional scale. A scale is unidimensional if the responses fall into a pattern in which endorsement of the item reflecting the extreme position results in endorsing all items that are less extreme.

Assume we are surveying opinions regarding a new style of running shoe. We have developed a preference scale of four items:

1. The Airsole is good-looking.
2. I will insist on Airsole next time because it is great-looking.
3. The appearance of Airsole is acceptable to me.
4. I prefer the Airsole style to other styles.

Participants indicate whether they agree or disagree. If these items form a unidimensional scale, the response patterns will approach the ideal configuration shown in the figure. Item 2 is the most extreme position of the four attitude statements. A participant who agrees with item 2 will agree with all four items. The items are ordered in the scalogram left to right from most to least extreme. If each agreement renders a score of 1, a score of 4 indicates all statements are agreed upon and represents the most favorable attitude. Persons with a score of 3 should disagree with item 2 but agree with all others, and so on. According to scalogram theory, this pattern confirms that the universe of content (attitude toward the appearance of this running shoe) is scalable.

13. Ethics in Data Collection

Ethics in data collection for research is crucial for maintaining integrity, respecting participants' rights, and ensuring the research process is conducted ethically.

Considerations on ethics in data collection include:

- **Informed Consent:** Researchers must inform participants about the nature and purpose of the study, potential risks and benefits, and their rights before obtaining their voluntary agreement to participate.
- **Privacy and Confidentiality:** Protecting participants' identities and ensuring confidentiality of their data is vital. Researchers must use codes or pseudonyms and store data securely to prevent unauthorized access.
- **Anonymity:** Ensure participants' anonymity, especially when dealing with sensitive information, by not collecting identifying information unless absolutely necessary.
- **Minimizing Harm:** Researchers must minimize any potential harm to participants, including physical, emotional, or psychological harm, during the research process.
- **Deception and Debriefing:** If deception is necessary, researchers must debrief participants after the study, explaining the true nature of the research and ensuring they leave the study feeling comfortable and informed.
- **Fair Treatment:** Researchers should avoid discrimination, bias, or stigmatization and treat all participants fairly and respectfully.
- **Voluntary Participation:** Participation in research should be voluntary without any form of coercion or pressure from the researcher.
- **Ethical Review and Approval:** Conduct research in compliance with institutional and professional ethics guidelines. Seek ethical review and approval before commencing the study, especially when dealing with human subjects.
- **Data Integrity and Transparency:** Ensure the accuracy and integrity of the data collected and present findings transparently without manipulating or altering results.
- **Respecting Cultural Differences:** Acknowledge and respect cultural differences and ensure research methods and data collection procedures are sensitive and appropriate within diverse cultural contexts.

Adhering to ethical standards in data collection is critical to maintaining trust in the research community and safeguarding the well-being and rights of research participants.

1. The issue of research ethics is pertinent at which of the following Stages of research?

- Defining the population, sampling procedures and techniques
- Data collection, data analysis and reporting of research findings/results
- Identification, definition and delimitation of research problem
- Deciding the quantitative or qualitative tracks or both for pursuing the research problem

Check

Question: 1 of 1 questions