CURRENT AFFAIRS QUIZ

Q.1) Consider the following pairs:

- 1. 'Palash flower' (Butea monosperma):: State flower of Jharkhand
- 2. Elephant:: Jharkhand's State animal

Which of the pairs given above is/are correct?

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

Q.1) Solution (c)

Jharkhand unveiled the new State logo on the eve of 74th Independence Day.



The State logo is circular in size with the Emblem of India placed at the centre.

Jharkhand's rich cultural heritage, age-old traditions, musical instruments, folklore and dance are reflected in the new logo. The logo accommodates 'Palash flower' (Butea monosperma), which is the State flower of Jharkhand. Its bright red colour represents Jharkhand's beauty and the struggle of people.

Elephant, Jharkhand's State animal is also in the logo.

Q.2) The term "COBOTICS", seen in news often, is associated with -

- a) Robots specifically designed to help in fight against COVID-19, where robots are isolated from human contact.
- b) Robots intended for direct human robot interaction within a shared space or where humans and robots are in close proximity.
- c) The hidden threat of antibiotics resistance lurking behind COVID-19.
- d) Interdisciplinary research area at the interface of computer science and engineering, involving design, construction, operation and use of robots during pandemic times.

Q.2) Solution (b)

Cobotics

- Cobots, or collaborative robots, are robots intended for direct human robot interaction within a shared space, or where humans and robots are in close proximity.
- Cobot applications contrast with traditional industrial robot applications in which robots are isolated from human contact.

Q.3) Among the agriculture product exported by India which one of the following which one of the following accounts for the highest export in terms of value in the last five years?

- a) Basmathi rice
- b) Wheat
- c) Fresh fruits
- d) Dairy products

Q.3) Solution (a)

In FY19, export of agricultural and processed food products totalled US\$ 38.49 billion. During the period, top commodities to be exported were basmati rice (US\$ 4.71 billion), buffalo meat (US\$ 3.58 billion) and non-basmati rice (US\$ 3.00 billion).

Q.4) Recently the word Sepsis is seen in news in reference to:

- a) Al technology for Data analysis
- b) Organ dysfunction
- c) New venture of CSIR
- d) Drug against cold and cough

Q.4) Solution (b)

Sepsis is a common cause of death from Coronavirus

Sepsis is a life-threatening organ dysfunction caused by the body's immune system overreacting in response to an infection.

This overactive, toxic response can lead to tissue damage, multiple organ failure and death.

Cause: Sepsis can be triggered by a variety of pathogens- Viruses, bacteria, fungi or parasites

Treatment: The blood is examined, a broad-spectrum antibiotic is administered, and sufficient blood circulation and ventilation are ensured.

Q.5) NASA's first mission dedicated to looking deep beneath the Martian surface is named as:

- a) Vision
- b) InSight
- c) View mars
- d) NIMM

Q.5) Solution (b)

NASA's InSight Mars Mission

NASA's Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (InSight) lander touched down on Mars at the end of 2018.

InSight is the first mission dedicated to looking deep beneath the Martian surface.

Among its science tools are a seismometer for detecting quakes, sensors for gauging wind and air pressure, a magnetometer, and a heat flow probe designed to take the planet's temperature.

It is part of NASA's Discovery Program.

InSight is a two year mission that will study the deep interior of Mars to learn how all celestial bodies with rocky surfaces, including Earth and the Moon, formed.

Q.6) The Offshore Patrol Vessels (OPV) ICGS is built by Goa Shipyard Limited has been launched by the Indian Coast Guard in the name of:

- a) Yashas
- b) Veer
- c) Vikram

d) Sarthak

Q.6) Solution (d)

An Offshore Patrol Vessels (OPV) for the Indian Coast Guard named as Indian Coast Guard Ship (ICGS) 'Sarthak' was launched on 13 August 2020, as a part of Atmanirbhar Bharat Week activities. Sarthak is 4th in the series of five Coast Guard OPVs, being designed in-house and built by Goa Shipyard Limited (GSL).

Q.7) Consider the following pairs

Rivers :: Origin states

Ganga :: Uttarakhand
 Indus :: Himachal Pradesh

3. Krishna :: Karnataka

Which of the pairs given above is/are correct?

a) 1 only

b) 2 only

c) 3 only

d) 1, 2 and 3

Q.7) Solution (a)

Important rivers and their places of origin

Rivers and their Places of Origin

River	Place of origin
Ganga	Gangotri (Uttarakhand)
Yamuna	Yamunotri (Uttarakhand)
Indus	Mansarovar (Tibet)
Narmada	Maikal Hills, Amarkantak (MP)
Tapi/Tapti	Satpura Range, Betul (MP)
Mahanadi	Nagri Town (Chhattisgarh)
Brahmaputra	Chemayungdung (Tibet)
Sutlej	Mt Kailash (Tibet)
Beas	Rohtang Pass (Himachal Pradesh)
Godavari	Nasik (Maharashtra)
Krishna	Mahabaleshwar (Maharashtra)
Cauvery	Brahmagiri Hills, Coorg (Karnataka)

Q.8) Consider the following Statements with respect to PM-CARES:

- 1. PM-CARE is under the ambit of Section 2(h) of RTI Act 2005.
- 2. Donations given to PM-CARE fund avail 100% tax exemption.

Which of the following is/are correct?

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

Q.8) Solution (b)

PM-CARES Fund

- PM-CARES was set up as a public charitable trust with the trust deed registered on March 27, 2020.
- It can avail donations from the foreign contribution and donations to fund can also avail 100% tax exemption.
- PM-CARES is different from the Prime Minister's National Relief Fund (PMNRF).
- PM-CARES Not a Public Authority: It has been stated that the PM-CARES Fund is not a Public Authority under the ambit of Section 2(h) of the RTI Act, 2005.

Composition:

- Prime Minister as chairperson
- Defence Minister, Home Minister, Finance Minister
- Three trustees nominated by the Prime Minister "who shall be eminent persons in the field of research, health, science, social work, law, public administration and philanthropy".
- Prime Minister's National Relief Fund (PMNRF)

Q.9) "Magistrate point", which is recently seen in news, is referred to:

- a) Name of the mountain peak
- b) Name of the District magistrate conference
- c) Name of the deepest point in Mediterranean sea
- d) Place of Honor given to retired magistrate

Q.9) Solution (a)

"Magistrate point"

- Spain mountain peak named after Uttarakhand's IAS officer Dr Ashish Chauhan
- Spanish mountaineer Antonio has named the virgin peak in Spain as 'Magistrate's Point' after the Spanish mountaineer summits
- Antonio has dedicated the achievement to the former Uttarkashi collector for his humane gesture for helping him during his summit to Mt Satopanth in 2018, where he had stuck amid climbing the peak

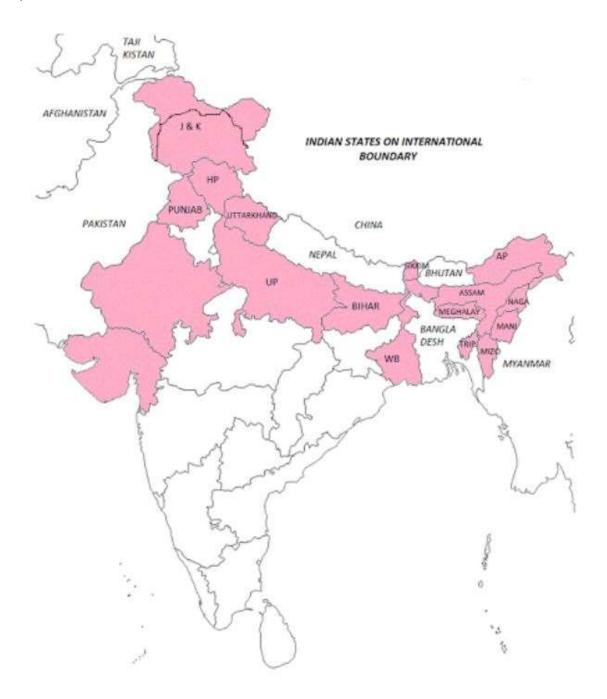
Q.10) Which of the following Indian states does not share border with Bhutan?

- a) West Bengal
- b) Assam
- c) Arunachal Pradesh

d) Bihar

Q.10) Solution (d)

Bhutan shares borders with the Indian states of Arunachal Pradesh in its east, Sikkim in the west and Assam and West Bengal in the south. The Himalayan kingdom also shares border with Nepal and China.



Q.11) Consider the following statement with respect to International Solar Alliance (ISA):

- 1. International Solar Alliance is head quartered in India
- 2. 67 countries have signed and ratified the ISA framework agreement

Which of the following is/are correct?

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

Q.11) Solution (c)

International Solar Alliance

- The launch of the International Solar Alliance (ISA) was announced by the Prime Minister of India (Narendra Modi) and former President of France (Francois Hollande) on 30th November 2015, at the 21st session of United Nations Climate Change Conference of the Parties (COP-21) in Paris, France.
- Head quarter of International Solar alliance is situated in Gurugram, India.
- It was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs.
- 67 countries have signed and ratified the ISA framework agreement.
- The Assembly of the ISA is the apex decision-making body which comprises representatives from each Member Country.
- It aims at lowering the cost of technology and finance and thereby facilitate deployment of over 1,000 GW of solar energy and mobilize more than USD 1,000 billion into solar power by 2030 in Member countries.
- Solar is a key source of affordable and reliable energy, thus it could play a significant role in achieving the universal energy access goal (SDG 7).

Q.12) What is the name of the app that ensures involvement of the public in monitoring of pollution entering into the river Ganga?

- a) Bhuvan Ganga web app
- b) Akash Ganga web app
- c) Sagar Ganga web app
- d) Jal web app

Q.12) Solution (a)

The application and web portal was launched after a Memorandum of Understanding (MoU) was signed between the National Mission for Clean Ganga and the National Remote Sensing Centre (ISRO).

Purpose of the user-friendly Bhuvan Mobile App and Portal

The android based app will help in monitoring Union Government's flagship Clean Ganga Mission.

It will be used as a tool to support decision making and planning for the Clean Ganga Mission.

It will enable public to collect and report information on various pollution sources that affects the water quality of river Ganga.

Bhuvan Ganga Portal is an exclusive web portal deployed in ISRO Bhuvan's geoportal with all geospatial layers related to river Ganga.

Q.13) Bhadbhut project is related to which river?

- a) Kaveri River
- b) Ganga River
- c) Yamuna River
- d) Narmada river

Q.13) Solution (d)

Bhadbhut project

It is located across the river Narmada, 5 km from Bhadbhut village and 25 km from the mouth of the river, where it flows into the Gulf of Khambhat.

The project is part of the larger Kalpasar Project, which entails the construction of a 30-km dam across the Gulf of Khambhat between Bharuch and Bhavnagar districts.

Kalpasar Project aims to store Gujarat's 25% average annual surface water resources..

This reservoir will store about 8,000 million cubic metres (MCM) of surface water and will be one of the world's largest freshwater reservoirs in the sea.

Q.14) Consider the following statements with respect to Mewati Gharana of music:

- 1. Gharana system can be seen in Carnatic music
- 2. Gharanas exist for both vocal and instrumental traditions as well as for dance.

Which of the above statements is/are correct?

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

Q.14) Solution (b)

Gharana in Hindustani music of India, is a community of performers who share a distinctive musical style that traces to a particular instructor or region or ancestry.

It includes not only peculiarities of performance and repertoire but also a broader ideology of music, aesthetics, and pedagogy.

The style must be passed down through at least three generations before it and its practitioners may be considered a gharana.

Gharanas exist for both vocal and instrumental traditions as well as for dance.

The gharana concept gained currency only in the nineteenth century when the royal patronage enjoyed by performers weakened. Performers were then compelled to move to urban centres. To retain their respective identities, they associated themselves with the names of the regions they hailed from.

Some of the gharanas well known for singing are: Agra, Gwalior, Mewati, Bhendibazar, Jaipur (Khyal Singing); Mathura, Rampur, Darbhanga (Dhrupad Singing); Banaras, Lucknow, Patiala (Thumri Singing).

Q.15) Consider the following statement with respect to ASHA worker

- 1. Full form of ASHA is Accredited Social Health Activist.
- 2. ASHA worker comes under Women and child development Ministry.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only

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

Q.15) Solution (a)

Accredited Social Health Activist (ASHA) is a trained female community health activist. Selected from the community itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system

ASHA is a community health worker instituted by the government of India's Ministry of Health and Family Welfare (MoHFW) as a part of the National Rural Health Mission (NRHM).

Role of ASHA

ASHA will take steps to create awareness and provide information to the community on determinants of health such as nutrition, basic sanitation & hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilization of health & family welfare services.

She would counsel women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception and prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs) and care of the young child.

She also work with the Village Health & Sanitation Committee of the Gram Panchayat to develop a comprehensive village health plan.

ASHA will provide primary medical care for minor ailments such as diarrhoea, fevers, and first aid for minor injuries.

She is a provider of Directly Observed Treatment Short-course (DOTS) under Revised National Tuberculosis Control Programme.

She also act as a depot holder for essential provisions being made available to every habitation like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet (IFA), chloroquine, Disposable Delivery Kits (DDK), Oral Pills & Condoms, etc. A Drug Kit is provided to each ASHA. Contents of the kit will be based on the recommendations of the expert/technical advisory group set up by the Government of India.

She will inform about the births and deaths in her village and any unusual health problems/disease outbreaks in the community to the Sub-Centres/Primary Health Centre.

Q.16) Consider the following statement:

- 1. "Swadeshi Microprocessor Challenge" is organized by Ministry of Science and technology
- 2. India developed its first indigenous microprocessor in 2018

Which of the following is/are correct?

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

Q.16) Solution (b)

"Swadeshi Microprocessor Challenge-Innovate Solutions for #Aatmanirbhar Bharat"

- It was launched under the ministry Ministry of Electronics & Information Technology (MeitY)
- Aim of the challenge is to provide further impetus to the strong ecosystem of Start-up, innovation and research in the country and to realize the ambition of self-reliance.
- Indigenously developed microprocessors SHAKTI and VEGA have also been rolled out under the Microprocessor Development Programme.
- Aim of Microprocessor Development Programme Meeting India's future requirements
 of strategic and industrial sectors and to mitigate the issues of security, licensing,
 technology obsolescence and cutting dependency on imports.
- India developed its first indigenous microprocessor "The Shakthi" in October 2018

Q.17) The 11th century Lingaraja temple in Bhubaneshwar is built in which style of Architecture?

- a) Dravidian style of Architecture
- b) Deula style of Architecture
- c) Nagara style of Architecture
- d) Vesara style of Architecture

Q.17) Solution (b)

About: Lingaraja Temple

Lingaraja Temple is a temple dedicated to Shiva and is one of the oldest temples in Bhubaneswar, Odisha.

It represents the quintessence of the Kalinga Architecture and culminating the medieval stages of the architectural tradition at Bhubaneswar.

The temple is believed to be built by the kings from the Somavamsi dynasty, with later additions from the Ganga rulers.

It is built in the Deula style that has four components namely, vimana (structure containing the sanctum), jagamohana (assembly hall), natamandira (festival hall) and bhoga-mandapa (hall of offerings), each increasing in the height to its predecessor.

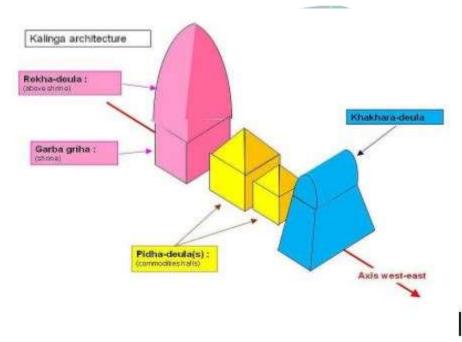


Image Source: Wikipedia

Bhubaneswar is called the Ekamra Kshetra as the deity of Lingaraja was originally under a mango tree (Ekamra) as noted in Ekamra Purana, a 13th-century Sanskrit treatise.

The temple has images of Vishnu, possibly because of the rising prominence of Jagannath sect emanating from the Ganga rulers who built the Jagannath Temple in Puri in the 12th century.

Q.18) Consider the following statements

- 1. IUCN status of African cheetah is Vulnerable
- 2. The Asiatic Cheetah was officially declared extinct from India in 1952

Which of the following is/are correct?

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

Q.18) Solution (c)

Explanation:

Cheetahs (Acinonyx jubatus) are large cat of the subfamily Felinae and are considered as the fastest land animal.

The 4 subspecies of cheetahs are Southeast African cheetah, Asiatic cheetah, Northeast African cheetah and Northwest African cheetah.

They are found in North, Southern and East Africa, and a few localities in Iran.

It inhabits a variety of mostly arid habitats like dry forests, scrub forests, and savannahs.

The cheetah has been classified as Vulnerableby the IUCN; and listed under Appendix I of CITES (Convention on International Trade in Endangered Species).

The Asiatic Cheetah was officially declared extinct from India in 1952.

Now the reintroducing program of cheetah is going on first it was reintroduced in Palpur Kuno sanctuary in Madhya Pradesh

Q.19) Recently a mobile van providing non-COVID essential healthcare services to the doorsteps of the people in the city of Ahmadabad was launched in the name of:

- a) Dhanvantri Rath
- b) Dhanvantri Sathi
- c) Dhanvantri Shakti
- d) Medicine at your door

Q.19) Solution (a)

Dhanvantri Rath is a unique and innovative example has been set by the Ahmedabad Municipal Corporation (AMC).

Key Features of Dhanvantri rath:

• Many of the large hospitals in the city have been dedicated for COVID-19 treatment.

- Hence various measures have been taken to ensure that non-COVID essential services related to diabetes, blood pressure, heart ailment etc., are also provisioned to people who cannot visit the hospitals as many of them were not operating the OPDs.
- One of interventions adopted by AMC is large scale deployment of the Mobile Medical Vans named 'Dhanvantri Rath'.
- These vans have an Ayush Doctor, paramedic and nursing staff along with local Medical Officer from Urban Health Centre of AMC.
- OPD SERVICES: These vans have been visiting various areas and providing OPD services for non-COVID essential services and field medical consultations to people all over Ahmedabad City at their doorsteps.
- CLINICAL TREATMENT: Dhanvantri Rath has helped identify those who need further clinical treatment or an IPD admission, and ensured that they reach the hospital in a timely manner.
- The mobile medical vans carry all essential medicines including ayurvedic & homeopathic medicines, vitamin supplements, basic testing equipments along with pulse Oxymeter.

Q.20) Pacheshwara multi-purpose project is constructed over which of the following river?

- a) Ganga River
- b) Mahakali River
- c) Yamuna River
- d) Sutlej River

Q.20) Solution (b)

Pancheshwar multi-purpose project

- It is located at Narayan Ghat of Dharchula on Mahakali River(also known as Kali Ganga in Uttarakhand) in Nepal.
- After completion dam will be the second largest dam in the 6720 Mega Watt (MW) power production.
- This project will regulate and control the free flow of Karnali and Mohana rivers which cause floods in Kheri, Pilibhit of Uttar Pradesh and other Terai districts of northern India.

Q.21) Consider the following statements with respect to National recruitment agency:

1. The NRA will conduct the Common Eligibility Test (CET) for recruitment to all posts in government and public sector banks.

2. Common eligibility test conducted by National recruitment agency will be held twice in a year.

Which of the above statements is/are correct?

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

Q.21) Solution (b)

A new National Recruitment Agency (NRA) will be set up to conduct the Common Eligibility Test (CET) for all various competitive examinations, in which an estimated 2.5 crore candidates appear annually.

NRA will conduct preliminary examinations for all these recruitment, which are at present conducted by the Staff Selection Commission (SSC) and the Institute of Banking Personnel Selection (IBPS).

It will then subsequently forward the list of qualifying candidates to the respective recruiting agencies to conduct the mains examinations.

The basic idea behind this proposal is to shortlist qualifying candidates through a Common Eligibility Test before sending them for the mains examination.

Salient features:

- The Common Eligibility Test will be held twice a year.
- There will be different CETs for graduate level, 12th Pass level and 10th pass level to facilitate recruitment to vacancies at various levels.
- The CET will be conducted in 12 major Indian languages. This is a major change, as hitherto examinations for recruitment to Central Government jobs were held only in English and Hindi.
- To begin with CET will cover recruitments made by three agencies: viz. Staff Selection Commission, Railway Recruitment Board and the Institute of Banking Personnel Selection. This will be expanded in a phased manner.
- CET will be held in 1,000 centres across India in a to bid remove the currently prevalent urban bias. There will be an examination centre in every district of the country. There will be a special thrust on creating examination infrastructure in the 117 aspirational districts.
- CET will be a first level test to shortlist candidates and the score will be valid for three years.

 There shall be no restriction on the number of attempts to be taken by a candidate to appear in the CET subject to the upper age limit. Age relaxation for SC/ST and OBC candidates as per existing rules will apply.

Q.22) Consider the following with respect to The Technology Information, Forecasting and Assessment Council (TIFAC):

- 1. It is an autonomous technology think tank under Ministry of chemicals and fertilizers.
- 2. Recently TIFAC highlighted the shortcomings of the Indian chemical industry which prove to be barriers in competing with China.

Which of the above statements is/are correct?

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

Q.22) Solution (b)

Technology Information, Forecasting and Assessment Council (TIFAC)

- TIFAC is an autonomous organisation and think-tank of the Department of Science and Technology under the ministry of Sccience and technology.
- It was established in 1986, as per the recommendation of Technology Policy Implementation Committee (TPIC) in 1985.
- Recently, a report by the Technology Information Forecasting and Assessment Council (TIFAC) has highlighted the shortcomings of the Indian chemical industry which prove to be barriers in competing with China.
- Thinking for the future in important socio-economic sectors is one of its mandates.
- TIFAC activities comprise of wide array of technology areas and fill a critical gap in the overall S&T system of India.

Q.23) Which of the following Utsav, which was recently in news, is mentioned in the holy book Guru Granth Sahib?

- a) Prakash Purab utsav
- b) Deepa utsav
- c) Aditya utsav
- d) Pach utsav

Q.23) Solution (a)

- The first Prakash Purab Utsav marked the installation of Guru Granth Sahib in Harmandir Sahib, also known as the Golden temple, in 1604.
- Granth Sahib is the sacred scripture of Sikhism (religion). It is a collection of nearly 6,000
 hymns of the Sikh Gurus (religious leaders) and various early and medieval saints of
 different religions and castes.
- It is the central object of worship in all gurdwaras and is accorded the reverence paid to a living Guru.
- The first version of the book was compiled by the 5th Sikh Guru Arjan at Amritsar in 1604 CE. He included his own hymns and those of his predecessors, the Gurus Nanak, Angad, Amar Das, and Ram Das, and a selection of devotional songs of both Hindu and Islamic saints.
- The language is mostly Punjabi or Hindi, interspersed with words.
- After the death of Guru Gobind Singh, his hymns and other writings were compiled into a book known as the Dasam Granth.

Q.24) Consider the following statements:

- 1. International Civil Aviation Organization is a United Nations (UN) specialized agency.
- 2. India is a member of International Civil Aviation.

Which of the above statements is/are correct?

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

Q.24) Solution (c)

International Civil Aviation Organization

- ICAO is a United Nations (UN) specialized agency, established in 1944, which laid the foundation for the standards and procedures for peaceful global air navigation.
- The Convention on International Civil Aviation was signed on 7th December 1944 in Chicago.
- It established the core principles permitting international transport by air, and also led to the creation of the ICAO.

- It is one of the objectives is to foster the planning and development of international air transport so as to ensure the safe and orderly growth of international civil aviation throughout the world.
- India is among its 193 members.
- It is headquartered in Montreal, Canada.

Q.25) Which of the following statements says about Article 143:

- a) President to seek the opinion of Supreme court
- b) The executive power of the State shall be vested in the Governor
- c) There shall be a Comptroller and Auditor General of India
- d) Supreme Court the can take up cases straight instead of going through a lower court

Q.25) Solution (a)

Article 143 is about Advisory Jurisdiction

The Constitution under Article 143 authorises the President to seek the opinion of the Supreme Court in the two categories of matters:

On any question of law or fact of public importance which has arisen or which is likely to arise. The SC may tender or may refuse to tender its opinion to the President.

On any dispute arising out of any pre-constitution treaty, agreement, covenant, engagement, sanador other similar instruments. Here, the SC must tender its opinion to the President.

In both the cases, the opinion expressed by the Supreme Court is only advisory and not a judicial pronouncement. Hence, it is not binding on the President.

The references made by the President under Article 143 are decided by a Bench consisting of at least five judges.

Few important references made by the President to the SC under its advisory jurisdiction are:

- Berubari Union, 1960.
- Cauvery Water Disputes Tribunal, 1992.
- Rama Janma Bhumi case, 1993.
- Punjab Termination of Agreements Act, 2004.
- 2G spectrum case verdict and the mandatory auctioning of natural resources across all sectors, 2012.

Q.26) Consider the following statements with respect to Swachh Survekshan 2020:

- 1. It has been launched by the Union Ministry of Housing and Urban Affairs.
- 2. It is the first edition of the annual cleanliness urban survey.

Which of the following statements is/are correct?

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

Q.26) Solution (a)

Swachh Survekshan 2020

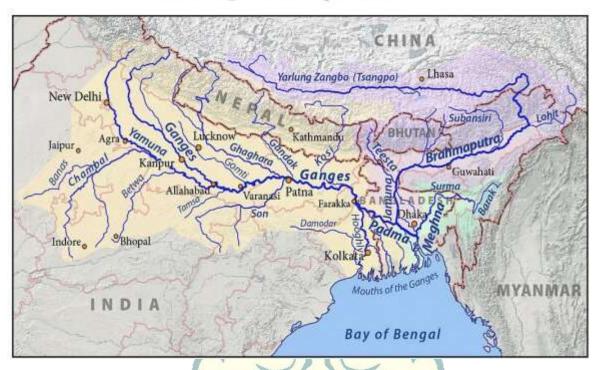
- Union Ministry of Housing and Urban Affairs launched the Swachh Survekshan 2020 report
- It is the fifth edition of the annual cleanliness urban survey conducted by the MoHUA. It is one of the world's largest sanitation surveys.
- This year the Ministry has released rankings based on the categorisation of cities on population, instead of releasing overall rankings.
- The categories based on population were introduced in 2019 for the first time but the exact groupings have been changed this year.ual cleanliness urban survey
- In July 2020, MoHUA launched the sixth edition of the survey, Swachh Survekshan 2021 and also introduced a new performance category, the Prerak DAUUR Samman.
- It has a total of five additional subcategories namely Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze) and Aarohi (Aspiring).

Q.27) Which of the following statements is correct with respect to Teesta River?

- a) It is the tributary of River Ganga.
- b) It originates in Tibet.
- c) The main tributary of river Teesta is the Rangeet River.
- d) It makes a border between West Bengal and Bihar

Q.27) Solution (c)

The Ganges-Brahmaputra Basin



- Teesta River originates from the Pahunri (or Teesta Kangse) glacier above 7,068 m, and flows southward through gorges and rapids in the Sikkim Himalaya.
- It flows through Sikkim and West Bengal to merge with the Brahmaputra in Assam
- Teesta River is considered to be the lifeline of the Sikkim.
- The basin lies in the states of Sikkim (72.43%) and West Bengal (27.57%).
- The main tributary of river Teesta is the Rangeet River.
- Teesta River makes a border between Sikkim and West Bengal before joining the Brahmaputra as a tributary in Bangladesh

Q.28) Consider the following statements:

- 1. It is a vast country stretching into the Sahara Desert in western Africa.
- 2. It got independence from France in 1960.
- 3. It is a landlocked country in West Africa with Niger to the east, Ivory Coast to the south, Senegal to the west.

The above statements explain which of the following country?

- a) Nigeria
- b) Libya
- c) Sudan
- d) Mali

Q.28) Solution (d)



- Mali is a landlocked country in West Africa.
- It got independence from France in 1960.
- Its capital is Bamako.
- It borders Niger to the east, Cote d'Ivoire to the south, Senegal to the west.
- Most of it lies in the southern Sahara Desert.
- Some of Mali's prominent natural resources include gold, being the third largest producer of gold in the African continent and salt.
- It was recently in news because its President has announced his resignation amid a military coup.

Q.29) Consider the following with respect to National Cadet Corps:

- 1. The NCC was formed after the Independence.
- 2. The NCC falls under the purview of the Ministry of Defence.

Which of the following is/are correct?

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

Q.29) Solution (c)

National Cadet Corps (NCC) was formed in 1948 on the recommendation of H. N. Kunzru Committee.

The NCC falls under the purview of the Ministry of Defence and is headed by a Director General of three-star military rank.

It enrolls cadets at high school and college level and also awards certificates on completion of various phases.

The NCC cadets receive basic military training at various levels and also have academic curriculum basics related to Armed forces and their functioning.

Various training camps, adventure activities and military training camps are an important aspect of NCC training.

Q.30) Which of the following country is not a member of ASEAN?

- a) Indonesia
- b) Sri Lanka
- c) Singapore
- d) Malaysia

Q.30) Solution (b)

The Association of Southeast Asian Nations is a regional organization which was established to promote political and social stability amid rising tensions among the Asia-Pacific's post-colonial states.

- The motto of ASEAN is "One Vision, One Identity, One Community".
- 8th August is observed as ASEAN Day.
- ASEAN headquartered in Indonesia, Jakarta.
- ASEAN-led Forums
- ASEAN Regional Forum (ARF)
- ASEAN Plus Three
- East Asia Summit (EAS)



STATIC QUIZ

Q.1) Consider the following statements:

- 1. Primary productivity is constant across different types of ecosystems.
- 2. Secondary productivity is defined as the rate of formation of new organic matter by consumers.

Which of the statements given above is/are NOT CORRECT?

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

Q.1) Solution (a)

Primary productivity depends on the plant species inhabiting a particular area. It also depends on a variety of environmental factors, availability of nutrients and photosynthetic capacity of plants. Therefore, Primary Productivity varies in different types of ecosystems.

Hence Statement 1 is incorrect.

Secondary productivity is defined as the rate of formation of new organic matter by consumers.

Hence Statement 2 is correct.

Q.2) Consider the following statements:

- 1. Primary Carnivores are also the primary consumers.
- 2. Death of organism is the beginning of the detritus food chain/web.

Which of the statements given above is/are correct?

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

Q.2) Solution (b)

Herbivores are considered as primary consumers. Primary carnivores can be considered as secondary consumers.

Hence Statement 1 is incorrect.

Death of organism is the beginning of the detritus food chain/web.

Hence Statement 2 is correct.

Q.3) Consider the following statements:

- 1. Each trophic level has a certain mass of living material at a particular time called as the standing crop.
- 2. The biomass of a species is expressed only in terms of dry weight.

Which of the statements given above is/are correct?

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

Q.3) Solution (a)

Each trophic level has a certain mass of living material at a particular time called as the standing crop. The standing crop is measured as the mass of living organisms (biomass) or the number in a unit area.

Hence Statement 1 is correct.

The biomass of a species is expressed in terms of fresh or dry weight.

Hence Statement 2 is incorrect.

Q.4) Consider the following statements:

- 1. The pyramid of biomass in sea is generally inverted.
- 2. A given species may occupy more than one trophic level in the same ecosystem at the same time.

Which of the statements given above is/are NOT CORRECT?

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

Q.4) Solution (d)

The pyramid of biomass in sea is generally inverted, because the biomass of fishes far exceeds that of phytoplankton.

Hence Statement 1 is correct.

A given species may occupy more than one trophic level in the same ecosystem at the same time. For example, a sparrow is a primary consumer when it eats seeds, fruits, peas, and a secondary consumer when it eats insects and worms.

Hence Statement 2 is correct.

Q.5) Consider the following statements:

- 1. Atmospheric inputs of carbon through rainfall are much smaller than phosphorus inputs.
- 2. Gaseous exchanges of phosphorus between organism and environment are negligible.

Which of the statements given above is/are correct?

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

Q.5) Solution (b)

Atmospheric inputs of phosphorus through rainfall are much smaller than carbon inputs.

Hence Statement 1 is incorrect.

Gaseous exchanges of phosphorus between organism and environment are negligible.

Hence Statement 2 is correct.

Q.6) Which of the following best defines the permaculture?

- a) Permaculture is a system of agriculture and aquaculture within the ecological carrying capacity of the region.
- b) Permaculture is a system of agricultural and social design principles centered on simulating or directly utilizing the patterns and features observed in natural ecosystems.
- c) Permaculture is a system of agriculture and agro based industry developing side by side.
- d) None of the above

Q.6) Solution (b)

- Permaculture is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems.
- It is the harmonious integration of landscape and people —providing their food, energy, shelter, and other material and non-material needs in a sustainable way.
- The term was coined by Bill Mollison in 1978.

Hence Statement b is correct

Q.7) Which of the following statements correctly explains the 10 per cent law in context of ecology?

- a) Only 10 per cent of the energy is transferred to each trophic level from the lower trophic level.
- b) Biomass in one tropic level is only 10% of the lower trophic level.
- c) With 10 per cent increase in sunlight the vegetation growth in an ecosystem gets doubled.
- d) With increase in global warming the temperature will increase by 10 per cent.

Q.7) Solution (a)

- The Ten percent law of transfer of energy from one trophic level to the next was introduced by Raymond Lindeman (1942).
- According to this law, during the transfer of energy from organic food from one trophic level to the next, only about ten percent of the energy from organic matter is stored as flesh.

Hence Statement a is correct

Q.8). Which of the following statements regarding Ecological succession is/are correct?

- 1. Hydrarch succession takes place in wetter areas and the successional series progress from hydric to the mesic conditions.
- 2. Xerarch succession takes place in dry areas and the series progress from xeric to mesic conditions.

Select the correct answer using the code given below:

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

d) Neither 1 nor 2

Q.8) Solution (c)

- The gradual and fairly predictable change in the species composition of a given area is called ecological succession
- Based on the nature of the habitat whether it is water (or very wet areas) or it is on very dry areas succession of plants is called hydrach or xerarch, respectively.

Hydrarch succession takes place in wetter areas and the successional series progress from hydric to the mesic conditions.

Hence Statement 1 is correct

Xerarch succession takes place in dry areas and the series progress from xeric/dry to mesic conditions.

Hence Statement 2 is correct

Q.9) "The entire complement of species of organisms, plants and animals found within a given region". Select the correct term related to the phrase:

- a) Community
- b) Biotype
- c) Biota
- d) Biome

Q.9) Solution (c)

Community is an assemblage or association of populations of two or more different species occupying the same geographical area and in a particular time, also known as a biocoenosis.

Biotype: A biotope is an area of uniform environmental conditions providing a living place for a specific assemblage of plants and animals. Biotope is almost synonymous with the term habitat.

Biota: The entire complement of species of organisms, plants, and animals, found within a given region.

Biome: A large terrestrial ecosystem characterized by specific plant communities and formations; usually named after the predominant vegetation in the region.

Biosphere: The totality of life on or near Earth's surface.

Q.10) Consider the following statements with regard to the general characteristics for Lake Ecology:

- 1. The nutrient content is very low in Oligotrophic whereas nutrient content is very high in Eutrophic
- 2. Oxygen in the hypolimnion is present in Eutrophic whereas is absent in Oligotrophic.

Which of the above statements is/are correct?

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

Q.10) Solution (a)

On the basis of their nutrient content, they are categorized as Oligotrophic (very low nutrients), Mesotrophic (moderate nutrients) and Eutrophic (highly nutrient rich).

Vast majority of lakes in India are either Eutrophic or Mesotrophic because of the nutrients derived from their surroundings or organic waste entering them.

The nutrient content is very low in Oligotrophic whereas nutrient content is very high in Eutrophic

Hence Statement 1 is correct

Oxygen in the hypolimnion (bottom layer) is absent in Eutrophic whereas is present in Oligotrophic.

Hence Statement 2 is incorrect

Q.11) Consider the following statements:

- 1. The sudden and unpredictable change in the species composition of a given area is called ecological succession.
- 2. The entire sequence of communities that successively change in a given area are called seral communities.

Which of the statements given above is/are NOT CORRECT?

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

Q.11) Solution (c)

The gradual and fairly predictable change in the species composition of a given area is called ecological succession.

Hence Statement 1 is incorrect.

The entire sequence of communities that successively change in a given area are called sere(s).

The individual transitional communities are termed seral stages or seral communities.

Hence Statement 2 is incorrect.

Q.12) Consider the following statements:

- 1. Before a biotic comm<mark>unity of diverse organisms can beco</mark>me established, there must be soil.
- 2. Primary succession begins in areas where natural biotic communities have been destroyed.

Which of the statements given above is/are correct?

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

Q.12) Solution (a)

Before a biotic community of diverse organisms can become established, there must be soil.

Hence Statement 1 is correct.

Secondary succession begins in areas where natural biotic communities have been destroyed.

Hence Statement 2 is incorrect.

Q.13) Consider the following statements:

- 1. The species that invade a bare area are called pioneer species.
- 2. The climax community remains stable as long as the environment remains unchanged.

Which of the statements given above is/are correct?

a) 1 only

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

Q.13) Solution (c)

The species that invade a bare area are called pioneer species. In primary succession on rocks these are usually lichens which are able to secrete acids to dissolve rock,

Hence Statement 1 is correct.

The climax community remains stable as long as the environment remains unchanged.

Hence Statement 2 is correct.

Q.14) Consider the following statements:

- 1. Nitrifying bacteria change the ammonia in the soil to nitrates and then into nitrites.
- 2. Nitrogen oxides dissolve in rain forming nitrates.

Which of the statements given above is/are NOT CORRECT?

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

Q.14) Solution (a)

Nitrifying bacteria change the ammonia in the soil to nitrites and then into nitrates.

Hence Statement 1 is incorrect.

Nitrogen oxides dissolve in rain forming nitrates.

Hence Statement 2 is correct.

Additional Information:

The inert nature of N2 means that biologically available nitrogen is often in short supply in natural ecosystems, limiting plant growth.

Q.15) Consider the following statements:

1. Oceans stores significantly higher amounts of Carbon as compared to atmosphere.

2. Decomposers also contribute substantially to CO2 pool by their processing of waste materials.

Which of the statements given above is/are correct?

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

Q.15) Solution (c)

Oceans stores significantly higher amounts of Carbon as compared to atmosphere.

Hence Statement 1 is correct.

Decomposers also contribute substantially to CO2 pool by their processing of waste materials and dead organic matter of land or oceans.

Hence Statement 2 is correct.

Q.16) Consider the following statements:.

- 1. The flow of energy from producer to top consumers is called energy flow which is bidirectional.
- 2. The pyramid of energy is always upward, with a large energy base at the bottom.
- 3. Biomass pyramid concept helps to explain the phenomenon of biological magnification.

Which of the above statements is/are correct?

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

Q.16) Solution (a)

The flow of energy from producer to top consumers is called energy flow which is unidirectional.

Hence Statement 1 is incorrect

The pyramid is always upward, with a large energy base at the bottom.

Hence Statement 2 is correct

Energy pyramid concept helps to explain the phenomenon of biological magnification the tendency for toxic substances to increase in concentration progressively at higher levels of the food chain

Hence Statement 3 is incorrect

Q.17) Biomagnification refers to the tendency of pollutants to concentrate as they move from one trophic level to the next. Consider the following statements.

- 1. In biomagnification there is an increase in concentration of a pollutant from one link in a food chain to another.
- 2. In order for biomagnification to occur, the pollutant must be long-lived, mobile, soluble in water and biologically inactive.

Which of the above statements is/are correct?

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

Q.17) Solution (a)

In biomagnification there is an increase in concentration of a pollutant from one link in a food chain to another.

Hence Statement 1 is correct

In order for biomagnification to occur, the pollutant must be: long-lived, mobile, soluble in fats, biologically active.

Hence Statement 2 is incorrect

Q.18) With reference to food chains in ecosystems, consider the following statements:

- 1. A food chain illustrates the order in which a chain of organisms feed upon each other.
- 2. A food chain illustrates the numbers of each organism which are eaten by others.

Which of the statements given above is / are correct?

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

Q.18) Solution (a)

A food chain illustrates the order in which a chain of organisms feed upon each other.

Hence statement 1 is correct.

A food web illustrates the numbers of each organism which are eaten by others

Hence statement 2 is incorrect.

Q.19) Which of the statements given below is/are correct regarding phosphorus cycle?

- 1. Rocks are the major reservoir of phosphorus which contains phosphorus in the form of phosphates.
- 2. Animals obtain phosphorus indirectly through plants.
- 3. There is no respiratory release of phosphorus in atmosphere.

Select the correct answer from the code given below:

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

Q.19) Solution (d)

Rocks are the major reservoir of phosphorus which contains phosphorus in the form of phosphates.

Hence statement 1 is correct.

Animals obtain phosphorus indirectly through plants.

Hence statement 2 is correct.

There is no respiratory release of phosphorus in atmosphere.

Hence statement 3 is correct.

Q.20) The benefits that people obtain from ecosystems are termed as ecosystem services. Which of the following is/are the types of Ecosystem services?

- 1. Provisioning services
- 2. Regulating services
- 3. Habitat services
- 4. Cultural services

Select the correct answer from the code given below:

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

Q.20) Solution (d)

Ecosystem services can be categorized in four main types:

Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fiber, genetic resources and medicines.

Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control.

Habitat services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools.

Cultural services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values.

Q.21) Consider the following statements:

- 1. Taiga is devoid of trees except stunted shrubs in the southern part of taiga biome, ground flora includes lichen, mosses and sedges.
- 2. No two Biomes are alike.

Which of the statements given above is/are NOT CORRECT?

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

Q.21) Solution (a)

Tundra is devoid of trees except stunted shrubs in the southern part of tundra biome, ground flora includes lichen, mosses and sedges.

Hence Statement 1 is incorrect.

No two Biomes are alike.

Hence Statement 2 is correct.

Q.22) Consider the following statements:

- 1. Epiphytes attach themselves to the trunks, branches, or foliage of trees.
- 2. Epiphytes use its host solely as a means of physical support.

Which of the statements given above is/are correct?

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

Q.22) Solution (c)

Epiphytes ("air plants") are common in low-latitude rainforest.

Epiphytes attach themselves to the trunks, branches, or foliage of trees.

Hence Statement 1 is correct.

Epiphytes use its host solely as a means of physical support.

Epiphytes include plants of many different types, among them ferns, orchids, mosses, and lichens.

Hence Statement 2 is correct.

Q.23) Consider the following statements:

- 1. Monsoon forests are found in Myanmar, Thailand, and Cambodia.
- 2. Trees of the monsoon forest shed their leaves in the dry season.

Which of the statements given above is/are correct?

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

Q.23) Solution (c)

The typical regions of monsoon forest are found in Myanmar, Thailand, and Cambodia.

Hence Statement 1 is correct.

Trees of the monsoon forest shed their leaves in the dry season.

The forest cover is sparser and the trees shorter than in rainforest. Tree trunks are massive, often with thick, rough bark. Branching starts at a comparatively low level and produces large, round crowns.

Hence Statement 2 is correct.

Q.24) Consider the following statements:

- 1. Subtropical evergreen forest is generally found in regions of moist subtropical climate, where winters are mild and there is ample rainfall throughout the year.
- 2. The subtropical broadleaf evergreen forest has fewer tree species than the low-latitude rainforests.

Which of the statements given above is/are NOT CORRECT?

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

Q.24) Solution (d)

Subtropical evergreen forest is generally found in regions of moist subtropical climate, where winters are mild and there is ample rainfall throughout the year. This forest occurs in two forms: broadleaf and needleleaf

Hence Statement 1 is correct.

The subtropical broadleaf evergreen forest has fewer tree species than the low-latitude rainforests, which also are home to broadleaf evergreen types. Trees are not as tall here as in the low-latitude rainforests, and their leaves tend to be smaller and more leathery; thus, the leaf canopy is less dense.

Hence Statement 2 is correct.

Q.25) Consider the following statements:

- 1. Midlatitude deciduous forest consists largely of trees that drop their leaves during the cold season.
- 2. Where the deciduous forests have been cleared by lumbering, pines readily develop as second-growth forest.

Which of the statements given above is/are correct?

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

Q.25) Solution (c)

Midlatitude deciduous forest is the forest type native to eastern North America and western Europe.

Midlatitude deciduous forest consists largely of trees that drop their leaves during the cold season.

Hence Statement 1 is correct.

Where the deciduous forests have been cleared by lumbering, pines readily develop as second-growth forest.

Trees common to the deciduous forest of eastern North America, southeastern Europe, and eastern Asia are oak, beech, birch, hickory, walnut, maple, elm, and ash

Hence Statement 2 is correct.

26) Which of the following statement is/are correct with respect to Wetlands?

- 1. Sediments deposited by the rivers and river floodplains helps in the formation of wetlands.
- 2. Wetlands are found from the tundra to the tropics and on every continent.
- 3. Lakes are generally less important when compared to wetland from the viewpoint of ecosystem and biodiversity conservation.

Select the correct answer using the code given below:

a) 1 only

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

Q.26) Solution (b)

Sediments deposited by the rivers and river floodplains helps in the formation of wetlands.

Hence Statement 1 is correct

Wetlands are found from the tundra to the tropics and on every continent except Antarctica.

Hence Statement 2 is incorrect

Lakes are generally less important when compared to wetland from the viewpoint of ecosystem and biodiversity conservation.

Hence Statement 3 is correct

Q.27) Consider the statements regarding 'Aquatic Biome'

- 1. The topmost zone near the shore of a lake or pond is the littoral zone.
- 2. The near-surface open water surrounded by the littoral zone is the profundal zone.
- 3. The deep-water part of the lake or pond is the limnetic zone.

Which of the statements given above is/are correct?

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

Q.27) Solution (b)

The topmost zone near the shore of a lake or pond is the littoral zone.

Hence Statement 1 is correct

The near-surface open water surrounded by the littoral zone is the limnetic zone.

Hence Statement 2 is incorrect

Plankton has short life spans—when they die, they fall into the deep-water part of the lake/pond, the profundal zone.

Hence Statement 3 is incorrect

Q.28) Consider the below statements in regard to plants found in Desert ecosystem:

- 1. Root system is not developed well and spread over small area to retain water.
- 2. Leaves are absent or reduced in size.
- 3. In some plants even the stem contains chlorophyll for photosynthesis.

Which of the statements given above is/are NOT CORRECT?

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

Q.28) Solution (a)

Deserts are formed in regions with less than 25 cm of annual rainfall, or sometimes in hot regions where there is more rainfall, but unevenly distributed in the annual cycle.

Root system is well developed and spread over large area.

Hence Statement 1 is incorrect

Leaves are absent or reduced in size.

Hence Statement 2 is correct

In some plants even the stem contains chlorophyll for photosynthesis.

Hence Statement 3 is correct

Q.29) Consider the following statements in regard to Aquatic Ecosystem:

- 1. Neustons are unattached organisms which live at the air-water interface.
- 2. Nektons are organisms which remain attached to stems and leaves of rooted plants and substances emerging above the bottom mud.
- 3. Planktons includes both microscopic plants like algae and animals like crustaceans and protozoans.

Which of the above given statement is/are correct?

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

Q.29) Solution (c)

Neustons are unattached organisms which live at the air-water interface such as floating plants.

Hence Statement 1 is correct

Periphytons are organisms which remain attached to stems and leaves of rooted plants and substances emerging above the bottom mud

Hence Statement 2 is incorrect

Planktons includes both microscopic plants like algae (phytoplanktons) and animals like crustaceans and protozoans (zooplanktons) found in all aquatic ecosystems, except certain swift moving waters.

Hence Statement 3 is correct

Q.30) Consider the following statements.

- 1. In Tundra type of vegetation, the growth of natural vegetation is very limited.
- 2. Tundra vegetation is found in the polar areas of Europe, Asia and North America.
- 3. Savannah shrubs are fire-resistant which helps them survive periodic, natural fire spread in forests.

Which of the above statements is/are correct?

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

Q.30) Solution (d)

In Tundra type of vegetation, the growth of natural vegetation is very limited.

Hence Statement 1 is correct

Tundra vegetation is found in the polar areas of Europe, Asia and North America.

Hence Statement 2 is correct

Savannah shrubs are fire-resistant which helps them survive periodic, natural fire spread in forests.

Hence Statement 3 is correct

Q.31) Consider the following statements:

1. Coastal forest is dominated by low trees with thick, leathery leaves that are well adapted to the long summer drought of the Mediterranean climate

2. Coastal forest is limited to west coasts between 30° and 40° to 45° N and S latitude.

Which of the statements given above is/are NOT CORRECT?

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

Q.31) Solution (c)

Sclerophyll forest is dominated by low trees with thick, leathery leaves that are well adapted to the long summer drought of the Mediterranean climate

Hence Statement 1 is incorrect.

Sclerophyll forest is limited to west coasts between 30° and 40° to 45° N and S latitude.

Hence Statement 2 is incorrect.

Q.32) Consider the following statements:

- 1. Steppe is a ground cover of tall grasses along with some broad-leafed herbs.
- 2. Steppe grades into semidesert in dry environments and into prairie where rainfall is higher.

Which of the statements given above is/are correct?

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

Q.32) Solution (b)

Steppe, or short-grass prairie, consists of sparse clumps of short grasses.

Tall-grass prairie is a ground cover of tall grasses along with some broad-leafed herbs.

Hence Statement 1 is incorrect.

Steppe grades into semidesert in dry environments and into prairie where rainfall is higher.

Hence Statement 2 is correct.

Q.33) Which of the following are NOT CORRECTLY matched:

Wetland

State in which it is located

1.	Hokera Wetland	Punjab
2.	Kanjli Lake	Uttarakhand
3.	Reunka Wetland	Himachal Pradesh

4. Saman Bird Sanctuary Rajasthan

Select the correct answer using the code given below:

a) 1 only

b) 1, 2 and 4 only

c) 1,2 and 3 only

d) 2 only

Q.33) Solution (b)

Wetland

State/UT in which it is located

1. Hokera Wetland Jammu and kashmir

2. Kanjli Lake Punjab

3. Reunka Wetland Himachal Pradesh4. Saman Bird Sanctuary Uttar Pradesh

Q.34) Consider the following statements:

- 1. A Country can join Ramsar Convention only if it designates one wetland site within its territory for inclusion in the List of Wetlands of International Importance.
- 2. International Water Management Institute (IWMI) is one of the International Organization Partner of the Ramsar Convention.

Which of the statements given above is/are NOT CORRECT?

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

Q.34) Solution (d)

At the time of joining the Ramsar Convention, each Contracting Party must designate at least one wetland site within their territory for inclusion in the List of Wetlands of International Importance.

Hence Statement 1 is correct.

International Water Management Institute (IWMI) is one of the International Organization Partner of the Ramsar Convention.

Hence Statement 2 is correct.

Q.35) Consider the following statements regarding Coral Polyps:

- 1. Each individual coral polyp extracts calcium carbonate from the seawater.
- 2. Coral polyp hosts symbiotic algae on which it is completely dependent for food.

Which of the statements given above is/are correct?

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

Q.35) Solution (a)

Each individual coral polyp extracts calcium carbonate from the seawater and secretes a limy skeleton around the lower half of its body.

Hence Statement 1 is correct.

Coral Polyps feed on minute animal and plant plankton. Although the coral polyp is an animal, reef-building hard corals are hosts to symbiotic algae that provide additional food for the coral polyp through photosynthesis..

Hence Statement 2 is incorrect.

Q.36) Which of the following statements about ocean acidification is/are NOT CORRECT?

- 1. Ocean acidification is the ongoing increase in the pH of the Earth's oceans, caused by the uptake of carbon dioxide from the atmosphere.
- 2. It increases the concentration of hydrogen ions and decreases the concentration of carbonate ions.

3. Ocean acidification leads to seawater pH go well below 7.

Select the correct answer using the code given below:

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

Q.36) Solution (c)

Ocean acidification is the ongoing decrease in the pH of the Earth's oceans, caused by the uptake of carbon dioxide (CO2) from the atmosphere.

Hence Statement 1 is incorrect

It increases the concentration of hydrogen ions and decreases the concentration of carbonate ions.

Hence Statement 2 is correct

Ocean acidification leads to seawater shift towards pH-neutral conditions rather than a transition to acidic conditions (pH < 7).

If pH will go well below 7 the entire marine life will extinguish.

Hence Statement 3 is incorrect

Q.37) Consider the following regarding types of corals:

- 1. Fringing reefs: reefs that grow close to the shore and extend out into the sea like a submerged platform.
- 2. Barrier reef: reefs separated from the land by wide expanses of water and follow the coastline.
- 3. Atolls: a roughly circular ring of reefs surrounding a lagoon, a low lying island, common in the Indian and South pacific oceans.

Which of the above statements is/are correct?

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

Q.37) Solution (d)

Fringing reefs: reefs that grow close to the shore and extend out into the sea like a submerged platform.

Hence Statement 1 is correct

Barrier reef: reefs separated from the land by wide expanses of water and follow the coastline.

Hence Statement 2 is correct

Atolls: a roughly circular ring of reefs surrounding a lagoon, a low lying island, common in the Indian and South pacific oceans.

Hence Statement 3 is correct

Q.38) Which of the following conditions is/are required for the Coral Reefs to Survive?

- 1. Sunlight
- 2. Clean water
- 3. Cold water temperature (12-15 degree Clesius)
- 4. Shallow water

Select the correct answer using the code given below:

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

Q.38) Solution (c)

Conditions is/are required for the Coral Reefs to Survive

- Sunlight
- Clean water
- Warm water temperature (around 20 degree Celsius)
- Shallow water

Q.39) Which of the following statements is/are correct regarding 'Hope spots'?

- 1. A hope spot is an area of an ocean that needs special protection because of its wildlife and significant underwater habitats.
- 2. India does not have any hope spots.

Select the correct answer using the code given below:

a) 1 only

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

Q.39) Solution (a)

A hope spot is an area of an ocean that needs special protection because of its wildlife and significant underwater habitats.

Hence Statement 1 is correct

Andaman and Nicobar Islands and Lakshadweep islands have been named as the new "hope spots" by the International Union for Conservation of Nature (IUCN).

Hence Statement 2 is incorrect.

Q.40) Consider the following statements regarding Marine Ecosystem:

- 1. They serve as the sink of a large quantity of runoff and wastes from land.
- 2. Salinity impacts the speed of sound more significantly when compared to temperature and pressure.

Which of the statements given above is/are correct?

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

Q.40) Solution (a)

They serve as the sink of a large quantity of runoff and wastes from land.

Hence Statement 1 is correct

The impact of Salinity on the speed of sound is insignificant when compared to the influence of temperature and pressure.

Hence Statement 2 is incorrect

Q.41) Consider the following statements regarding National Ganga Council:

- 1. Prime Minister of India is the chairperson of National Ganga Council.
- 2. The Council has been given overall responsibility for superintendence of pollution prevention and rejuvenation of River Ganga Basin, including Ganga and its tributaries.

Which of the statements given above is/are NOT CORRECT?

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

Q.41) Solution (d)

Prime Minister of India is the chairperson of National Ganga Council.

Hence Statement 1 is correct.

The Council has been given overall responsibility for superintendence of pollution prevention and rejuvenation of River Ganga Basin, including Ganga and its tributaries.

Hence Statement 2 is correct.

Q.42) Consider the following statements regarding Clean Ganga Fund:

- 1. Setting up of waste treatment and disposal plants along the river around the cities is one of the activities funded by Clean Ganga Fund.
- 2. Non-Resident Indians (NRIs) can also contribute to the Clean Ganga Fund.

Which of the statements given above is/are correct?

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

Q.42) Solution (c)

Setting up of waste treatment and disposal plants along the river around the cities is one of the activities funded by Clean Ganga Fund.

Some other activities include:

- Activities outlined under the 'Namami Gange' programme for cleaning of river Ganga.
- Control of non-point pollution from agricultural runoff, human defecation, cattle wallowing, etc.
- Conservation of the biotic diversity of the river.

Hence Statement 1 is correct.

Non-Resident Indians (NRIs) can also contribute to the Clean Ganga Fund.

Hence Statement 2 is correct.

Q.43) Which of the following are NOT CORRECTLY matched:

National Park

State in which it is located

1.	Sanjay Gandhi National Park	Uttar Pradesh
2.	Mukurthi National Park	Telangana
3.	Bannerghatta National Park	Karnataka
4.	Madhav National Park	Rajasthan

Select the correct answer using the code given below:

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

Q.43) Solution (b)

National Park

State in which it is located

1.	Sanjay Gandhi National Park	Maharashtra
2.	Mukurthi National Park	Tamil Nadu
3.	Bannerghatta National Park	Karnataka
4.	Madhav National Park	Madhya Pradesh

Q.44) "India – Spearheading Climate Solutions" publication is released by:

- a) Union Ministry of Environment, Forest and Climate Change
- b) NITI Aayog
- c) UNFCCC
- d) World Bank

Q.44) Solution (a)

"India – Spearheading Climate Solutions" publication is released by Union Ministry of Environment, Forest and Climate Change.

This publication "India – Spearheading Climate Solutions" mentions the key actions India has taken under various sectors towards combating and adapting to climate change.

Q.45) Consider the following statements:

- 1. One of the primary components of photochemical smog is ozone.
- 2. ASH TRACK mobile application tracks the ozone levels of a particular area.

Which of the statements given above is/are correct?

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

Q.45) Solution (a)

One of the primary components of photochemical smog is ozone.

While ozone in the stratosphere protects earth from harmful UV radiation, ozone on the ground is hazardous to human health.

Hence Statement 1 is correct.

ASH TRACK Mobile App has been launched by the Ministry of Power for better management of fly ash produced by thermal power plants by providing an interface between fly ash producers.

Hence Statement 2 is incorrect.

Q.46) Western Ghats has very rich biodiversity as compared to Eastern Ghats, because -

- 1. Western Ghats are continuous mountains.
- Western Ghats is area of high orographic precipitation.
- 3. Many major rivers have its source at Western Ghats.

Select the correct answer using the codes given below:

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

Q.46) Solution (d)

Western Ghats are continuous mountains.

Hence Statement 1 is correct

Western Ghats is area of high orographic precipitation.

Hence Statement 2 is correct

Many major rivers have its source at Western Ghats.

Hence Statement 3 is correct

Q.47) The kurinji flower, that blooms every 12 years in the Western Ghats and the Nilgiris are called...

- a) Hardy flowering plants
- b) Half-hardy flowering plants
- c) Gregarious flowering plants
- d) Non-gregarious flowering plants

Q.47) Solution (c)

 Neela Kurinji or Strobilanthes kunthianus is a shrub predominantly found in the Shola forests of Western Ghats and Nilgiri Hills of South India. It flowers once in 12 years and dies immediately after producing seeds. Such plants are called gregarious flowering plants.

Hence Statement c is correct

Q.48) Consider the following statements regarding Biosphere Reserves:

- 1. The core area should be large enough to sustain viable population of all trophic levels.
- 2. All biosphere reserves of India are under the MAB programme of UNESCO.

Which of the statements given above is/are correct?

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

Q.48) Solution (a)

The core area should be large enough to sustain viable population of all trophic levels.

Hence Statement 1 is correct

Man and Biosphere Reserve Programme of UNESCO only 11 of the 18 biosphere reserves are covered.

Hence Statement 2 is incorrect

Q.49) Consider the following regarding 'Conservation International'

- It is an international organization under United Nation Environment Program (UNEP) that aims to help stabilize global climate, protect fresh water, and ensure human wellbeing.
- 2. Biodiversity Hotspots is an initiative of Conservation International.

Which of the statements given above is/are correct?

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

Q.49) Solution (b)

Conservation International (CI) is an American non-profit environmental organization headquartered in Arlington, Virginia. Its goal is to protect nature as a source of food, fresh water, livelihoods and a stable climate.

Hence Statement 1 is incorrect

Biodiversity Hotspots is an initiative of Conservation International.

Biodiversity Hotspots project identifies and protects biological hotspots—places that exhibit the richest diversity and most threatened collections of plants and animals on our planet.

Hence Statement 2 is correct

Q.50) In order to name a biodiversity hotspot, which of the following criteria is not taken into account?

- a) Endemism
- b) Biodiversity loss
- c) Lesser inter species competition
- d) Species richness

Q.50) Solution (c)

Biodiversity Hotspot

To qualify as a biodiversity hotspot, a region must meet two strict criteria:

It must have at least 1,500 vascular plants as endemics — which is to say, it must have a high percentage of plant life found nowhere else on the planet. A hotspot, in other words, is irreplaceable.

It must have 30% or less of its original natural vegetation. In other words, it must be threatened.

Around the world, 35 areas qualify as hotspots. They represent just 2.3% of Earth's land surface, but they support more than half of the world's plant species as endemics — i.e., species found no place else — and nearly 43% of bird, mammal, reptile and amphibian species as endemics.

Hence Statement c is not taken into account.

Q.51) Consider the following statements:

- 1. National Air Quality Monitoring Programme (NAMP) is executed by Central Pollution Control Board.
- 2. Under NAMP 8 pollutants viz. PM10, PM2.5, SO2, NOx, ammonia (NH3), CO, ozone (O3), and benzene. PM10 are monitored.

Which of the statements given above is/are NOT CORRECT?

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

Q.51) Solution (b)

Central Pollution Control Board is executing a nation-wide programme of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP).

Hence Statement 1 is correct.

Under NAMP, four air pollutants viz. Sulphur Dioxide (SO2), Oxides of Nitrogen as NO2, Respirable Suspended Particulate Matter (RSPM / PM10) and Fine Particulate Matter (PM2.5) are monitored.

Hence Statement 2 is incorrect.

Q.52) Consider the following statements:

- 1. Ambient air quality generally refers to the condition or quality of the outdoor air.
- 2. National Ambient Air Quality Standards (NAAQs) are the standards for ambient air quality with reference to various identified pollutant notified by the CPCB under the the Environment (Protection) Act, 1986.

Which of the statements given above is/are correct?

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

Q.52) Solution (a)

Ambient air quality generally refers to the condition or quality of the outdoor air.

Hence Statement 1 is correct.

National Ambient Air Quality Standards (NAAQs) are the standards for ambient air quality with reference to various identified pollutant notified by the CPCB under the Air (Prevention and Control of Pollution) Act, 1981.

Hence Statement 2 is incorrect.

Q.53) Consider the following statements:

- 1. E-waste burning generally releases Cadmium, dioxin, and furans.
- 2. Dioxins and furans are highly carcinogenic and persist in the environment.

Which of the statements given above is/are correct?

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

Q.53) Solution (c)

E-waste burning releases toxic ashes, cadmium, dioxin, and furans.

Organic solid wastes emit an obnoxious odour on their decomposition and make the environment polluted.

Hence Statement 1 is correct.

The most lethal incineration emissions are dioxins and furans, which are highly carcinogenic and persist in the environment.

Hence Statement 2 is correct.

Q.54) Consider the following statements regarding National Clean Air Programme (NCAP):

- 1. National level target of 20-30% reduction of PM2.5 and PM10 concentration by 2040.
- The Central Pollution Control Board (CPCB) shall, execute the nation-wide programme for the prevention, control, and abetment of air pollution within the framework of the NCAP.

Which of the statements given above is/are correct?

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

Q.54) Solution (b)

National level target of 20-30% reduction of PM2.5 and PM10 concentration by 2024.

Hence Statement 1 is incorrect.

The Central Pollution Control Board (CPCB) shall, in consonance with the Air (Prevention and control of Pollution) Act, 1981, and in particular with the provision of Section 16(2)(b) of the Act, execute the nation-wide programme for the prevention, control, and abetment of air pollution within the framework of the NCAP.

Hence Statement 2 is correct.

Q.55) Consider the following statements:

- 1. Graded Response Action Plan (GRAP) for Delhi and the NCR region, comprises the graded measures for each source framed according to the AQI categories.
- 2. The responsibility of implementing GRAP lies with the Central Pollution Control Board (CPCB).

Which of the statements given above is/are correct?

a) 1 only

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

Q.55) Solution (a)

Graded Response Action Plan (GRAP) for Delhi and the NCR region, comprises the graded measures for each source framed according to the AQI categories.

Hence Statement 1 is correct.

The responsibility of implementing GRAP lies with the Environment Pollution (Prevention And Control) Authority (EPCA).

Hence Statement 2 is incorrect.

Q.56) Consider the following statements regarding thermal pollution:

- 1. Thermal pollution comes only in the form of dumping warm waters into lake, river, or ocean.
- Volcanic eruption is one source of thermal pollution.
- 3. Due to thermal pollution dissolved oxygen content in water increases.

Which of the statements given above is/are correct?

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

Q.56) Solution (b)

Any practice that affects the equilibrium of an aquatic environment may alter the temperature of that environment and subsequently cause thermal pollution. It may come in the form of warm or cold water being dumped into a lake, river, or ocean.

Hence Statement 1 is incorrect

Volcanic eruption is one source of thermal pollution.

Hence Statement 2 is correct

Due to thermal pollution dissolved oxygen content in water decreases.

Hence Statement 3 is incorrect

Q.57) Which of the following statements is/are correct regarding 'Blue Flag' certification?

- 1. It is given to cities which have taken stringent measures to curb air pollution.
- 2. It is a certification given by Foundation for Environmental Education (FEE).

Select the correct answer using the codes given below:

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

Q.57) Solution (b)

Blue Flag Certification Objective is Enhancing standards of cleanliness, upkeep and basic amenities at beaches.

Hence Statement 1 is incorrect

It is a certification given by Foundation for Environmental Education (FEE).

Hence Statement 2 is correct

Q.58) Photochemical smog is a mixture of pollutants that are formed when nitrogen oxides and volatile organic compounds (VOCs) react to sunlight. Consider the following about VOCs:

- VOCs are produced from the evaporation of naturally-occurring compounds such as terpenes.
- 2. VOCs are formed from the incomplete combustion of fossil fuels, from the evaporation of solvents and fuels, and from burning plant matter.

Which of the statements given above is/are correct?

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

Q.58) Solution (c)

VOCs are produced from the evaporation of naturally-occurring compounds such as terpenes which are the hydrocarbons in oils that make them burn. Eucalypts have also been found to release significant amounts of these compounds.

Hence Statement 1 is correct

VOCs are formed from the incomplete combustion of fossil fuels, from the evaporation of solvents and fuels, and from burning plant matter.

Hence Statement 2 is correct

Q.59) Which of the following substances are Ozone depleting substances?

- 1. Methyl Chloroform
- 2. Hydrochlorofluorocarbons
- 3. Methyl Bromide
- 4. Methyl lodide

Select the correct answer using the codes:

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

Q.59) Solution (a)

Methyl lodide is a naturally occurring substance, however it does not has ozone-depleting properties.

Q.60) Which of the following statements correctly explains 'Visual Pollution'?

- a) It is the presence of extra artificial light at night.
- b) It is the increase of dust and smoke in the atmosphere causing haziness.
- c) It is an aesthetic issue and refers to the impacts of pollution that impair one's ability to enjoy a vista or view.
- d) None of the above

Q.60) Solution (c)

Visual pollution is an aesthetic issue and refers to the impacts of pollution that impair one's ability to enjoy a vista or view.

Hence Statement c is correct