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60 Days Week-5&6 Compilation



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Q.1) Which of the below are atmospheric hazards?

- 1. Tropical cyclones
- 2. Thunderstorms
- 3. Snow avalanches
- 4. Hailstorms

Choose correct option from below:

- a) 1 and 2 only
- b) 1, 2 and 4 only
- c) 1, 2 and 3 only'
- d) All of the above

Q.1) Solution (d)

Phenomena associated with certain weather-generated events are grouped as atmospheric hazards. The individual hazards included are: Tropical Cyclones, Thunderstorms and Lightning, Tornados, Windstorms, Hailstorms, Snow Avalanches, Severe Winter storms and Extreme Summer Weather. Snowfall from a severe winter storm can prompt avalanches.

Q.2) National disaster risk index for India is prepared by?

- 1. Ministry of environment, forest and climate change
- 2. Ministry of home affairs
- 3. UNDP
- 4. NDMA

Choose correct option from below:

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

Q.2) Solution (b)

The Union ministry of Home Affairs with the support of United Nations Development Programme (UNDP) have prepared for the first time a national disaster risk index for India. It mapped hazards and vulnerabilities including economic vulnerabilities across 640 districts and all states including UTs. The index factors in exposure of population, agriculture and livestock and environmental risk.

Q.3) Consider the following statements:

- 1. The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015
- 2. It aims to prevent, reduce and mitigate only natural disasters
- 3. The Sendai Framework was the first international, binding agreement adopted within the context of the post- 2015 development agenda.

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All of the above

Q.3) Solution (a)

Statement-1: correct	Statement-2: incorrect	Statement-3: incorrect
Sendai Framework for	The Sendai framework will	It is a non-binding
Disaster Risk Reduction	apply to the risk of small-	agreement, which the
2015-2030 (hereafter	scale and large-scale,	signatory nations,
"Sendai Framework")	frequent and infrequent,	including India, will
adopted at the Third UN	sudden and slow-onset	attempt to comply with on
World Conference in	disasters, caused by	a voluntary basis.
Sendai, Japan, on March	natural or manmade	
18, 2015 (UNISDR 2015a)	hazards as well as	
as the successor	related environmental,	
instrument to the Hyogo	technological and	
Framework for Action	biol <mark>ogical hazards a</mark> nd	
2005-2015.	risks. It aims to guide the	
	multi-hazard management	
	of disaster risk in	
	development at all levels	
	as well as within and	
	across all sectors.	

Q.4) Consider the following statements with respect to State disaster response fund:

- 1. The Central Government contributes 50% of SDRF allocation for general category States/UTs and 90% for special category States.
- 2. A State Government may use up to 25 percent of the funds available under the SDRF for providing immediate relief for, they consider to be 'disasters' within the local context in the State and which are not included in the notified list of disasters.

Which of the above statement is/are correct?

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

Q.4) Solution: (d)

The State Disaster Response Fund (SDRF), constituted under Section 48 (1) (a) of the Disaster Management Act, 2005, is the primary fund available with State Governments for responses to notified disasters. The Central Government contributes **75% of SDR**F

allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).

Local Disaster: A State Government may use up to **10 percent** of the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be 'disasters' within the local context in the State and which are not included in the notified list of disasters of the Ministry of Home Affairs.

Q.5) Consider the following statements:

- 1. Disasters covered under SDRF are Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.
- 2. Ministry of Home affairs monitors relief activities for all the notified disasters

Which of the above statement is/are correct?

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

Q.5) Solution (a)

Disaster (s) covered under SDRF: Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.

Department of Agriculture and Cooperation under **Ministry of Agriculture (MoA)** monitors relief activities for calamities associated with drought, hailstorms, pest attacks and cold wave /frost while rest of the natural calamities are monitored by Ministry of Home Affairs.

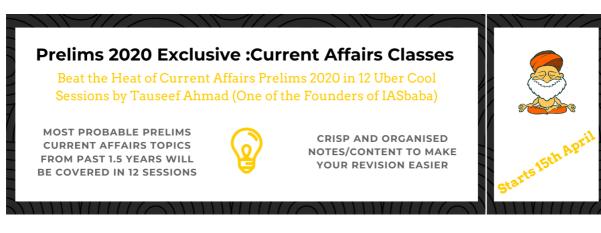
Q.6) Advance informed Agreement (AIA) procedure is related with?

- a) Basel convention
- b) Cartagena protocol
- c) Rotterdam convention
- d) Nagoya protocol

Q.6) Solution (b)

The **Cartagena Protocol on Biosafety** to the Convention on Biological Diversity is an international treaty governing the movements of living modified organisms (LMOs) resulting from modern biotechnology from one country to another.

It establishes an advance informed agreement (AIA) procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms into their territory.



Q.7) The Faith for Earth Initiative is launched by?

- a) IPCCC
- b) UN Environment
- c) WHO
- d) FAO

Q.7) Solution (b)

UN Environment launched the Faith for Earth Initiative in November 2017. The goal of Faith for Earth is to strategically engage with faith-based organizations and partner with them to collectively achieve the Sustainable Development Goals (SDG) and fulfill the objectives of the 2030 Agenda.

Faith for Earth has three main goals: to inspire and empower faith organizations and their leaders to advocate for protecting the environment, to green faith-based organizations' investments and assets to support the implementation of SDGs, and to provide them with knowledge and networks to enable their leaders to effectively communicate with decision-makers and the public.

Q.8) WEBINAR: Pesticide registration toolkit is maintained by?

- a) UN Environment
- b) WHO
- c) FAO
- d) UNESCO

Q.8) Solution (c)

The FAO Pesticide Registration Toolkit is a decision support system for pesticide registration authorities in low- and middle income countries, designed to assist in the evaluation and authorization of pesticides. It provides links to many pesticide-specific information sources such as registrations in other countries, scientific reviews, hazard classifications, labels, MRLs and pesticide properties. Various modules of Pesticide Registration Toolkit can be of use to those involved in the implementation of the Rotterdam Convention, in particular the Designated National Authorities (DNAs).

Q.9) Industrial chemicals and Pesticides have become Health and Environmental hazards. With reference to this consider the following statements:

- 1. Rotterdam convention covers pesticides and industrial chemicals that have been banned or severely restricted
- 2. Rotterdam convention is legally non-binding obligations for the controlling of chemicals and pesticides
- 3. Prior Informed Consent (PIC) is related with Rotterdam convention

Which of the above statement is/are correct?

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

Q.9) Solution (c)

The text of the Rotterdam Convention was adopted on 10 September 1998 by a Conference of Plenipotentiaries in Rotterdam, the Netherlands. The Convention entered into force on 24 February 2004.

The objectives of the Convention are:

- To promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm;
- To contribute to the environmentally sound use of those hazardous chemicals, by facilitating information exchange about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties.

The Convention creates **legally binding obligations for the implementation of the Prior Informed Consent (PIC) procedure.** It built on the voluntary PIC procedure, initiated by UNEP and FAO in 1989 and ceased on 24 February 2006.

Q.10) International Day for Biological Diversity is observed on?

- a) 21st May
- b) 22nd May
- c) 23rd May
- d) 22nd June

Q.10) Solution (b)

The United Nations has proclaimed May 22, The International Day for Biological Diversity (IDB) to increase understanding and awareness of biodiversity issues. When first created by the Second Committee of the UN General Assembly in late 1993, 29 December (the date of entry into force of the Convention of Biological Diversity), was designated The International Day for Biological Diversity.

Q.11) In the context of sustainable development Goals, Which of the below are crucial to achieve SDG'S?

- 1. Livestock farming
- 2. The loss of diverse diets
- 3. Marine conservation
- 4. Use of indigenous food crops in Agriculture

Choose correct option from below:

- a) 1 and 3 only
- b) 1, 3 and 4 only
- c) 2, 3 and 4 only
- d) All of the above.

Q.11) Solution (b)

The loss of diverse diets is directly linked to diseases or health risk factors, such as diabetes, obesity and malnutrition, and has a direct impact on the availability of traditional medicines. Thus this is a hurdle in achieving SDG'S.

Indigenous crops are helpful to mitigate the impact of climate change and more nutritious thus help in increased food production

Livestock farming and Marine resource (Fish) provide livelihood for millions thus important for achieving SDG targets.

Q.12) Bioremediation is a Technique used to clear pollutants through Biodegradation using Microbes. Which of the following are salient features of Bioremediation?

- 1. It is cost effective. No construction or additional infrastructure is required.
- 2. The microbial consortia used, exhibit growth at narrow temperature range
- 3. Control the nutrient level in water thus help in controlling "Eutrophication" process.

Which of the above statement is/are correct?

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

Q.12) Solution (c)

Bioremediation is the use of living microorganisms to degrade the environmental contaminants into less toxic forms. It uses naturally occurring bacteria and fungi or plants to degrade or detoxify substances hazardous to human health and/or the environment. The microorganisms may be indigenous to a contaminated area or they may be isolated from elsewhere and brought to the contaminated site.

Salient features:

- It is cost effective. No construction or additional infrastructure is required.
- These microbes are effective in controlling odour, reducing TSS, BOD, oil/ grease

accumulation in sewage/ polluted water and solids.

- These microbial consortia exhibit growth at wider temperature range
- These strains maintains a satisfactory level of DO and therefore aerators, which consume high power can be avoided or its use can be reduced.
- Control the nutrient level in water thus help in controlling "Eutrophication" process.

Q.13) Consider the following statements:

- 1. In situ bioremediation involves the treatment of the contamination on site.
- 2. Ex situ bioremediation involves the physical extraction of the contaminated media to another location for treatment

Which of the above statement is/are incorrect?

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

Q.13) Solution (d)

Statement-1: correct	Statement-2: correct
In situ bioremediation involves the	Ex situ bioremediation involves the
treatment of the contamination on site.	physical extraction of the contaminated
In the case of soil contamination, in situ	media to another location for treatment.
bioremediation involves the addition of	If the contaminants are just in the soil,
mineral nutrients. These nutrients	the contaminated soil is excavated and
increase the degradation ability of the	transported for treatment. If the
microorganisms that are already present	contamination has reached the
in the soil.	groundwater, it must be pumped and any
	contaminated soil must also be removed.

Q.14) Match the following pairs:

Method Characteristics

- 1. Microbial bioremediation : Uses microorganisms to break down contaminants by using them as a food source
- 2. Bioventing : Uses fungi's digestive enzymes to break down contaminants such as pesticides, hydrocarbons, and heavy metals.
- 3. Phytoremediation : Uses plants to bind, extract, and clean up pollutants such as pesticides, petroleum hydrocarbons, metals, and chlorinated solvents.
- 4. Mycoremediation : Blowing air from the atmosphere into the contaminated soil.

Which of the above is/are correctly matched?

- a) 1 and 2 only
- b) 1 and 4 only
- c) 1 and 3 only
- d) All of the above

Q.14) Solution (c)

source.BioventingThis consists of blowing air from the atmosphere into the contaminated so First, injection wells must be dug into the contaminated soil.PhytoremediationThis uses plants to bind, extract, are clean up pollutants such as pesticided petroleum hydrocarbons, metals, are chlorinated solvents.MycoremediationThis uses fungi's digestive enzymes	Microbial bioremediation	This uses microorganisms to break down
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		chlorinated solvents.
break down contaminants such a	Mycoremediation	This uses fungi's digestive enzymes to
		break down contaminants such as
pesticides, hydrocarbons, and heav		pesticides, hydrocarbons, and heavy
metals.		metals.

Q.15) Moving towards renewable energy is crucial to achieve climate agreement targets. In the context of this, consider the following statements about Biofuels:

- 1. Third generation Biofuels uses non-food crops for biofuel production
- 2. Biodiesel is alcohol produced from fermentation of crops and their byproducts
- 3. Biogas is produced by anaerobic digestion of inorganic materials
- 4. Rajasthan has become the first State in the country to implement the national policy on biofuels.

Which of the above statement is/are incorrect?

- a) 1 and 2 only
- b) 2 only
- c) 1 2, and 3 only
- d) All of the above

Q.15) Solution (c)

Rajasthan has become the first State in the country to implement the national policy on biofuels.

First generation biofuel	It uses the food crops like wheat and sugar for making
	ethanol and oil seeds for bio diesel by conventional
	method of fermentation.
Second generation biofuel	It uses non-food crops and feedstock such as Jatropha,
	wood, grass, seed crops, organic waste.
Third Generation Biofuels	It uses specially engineered Algae whose biomass is
	converted into biofuels.

Fourth Generation biofuel	It aims at not only producing sustainable energy but also
	a way of capturing and storing CO2.

Bio ethanol	It is an alcohol produced from fermentation of carbohydrate and
	cellulosic material of crops and other plants and grasses.
Bio Diesel	It is a methyl or methyl ester of fatty acids produced by trans
	esterification of oils and fats obtained from plants and animals.
Bio gas	Biogas (primarily a mixture of methane and other gases like CO2 and
	N2) is produced by anaerobic digestion of organic materials
Biojet	It is a type of biofuel which are produced from biomass resources and
	used in place of, or blended with air turbine fuel.

Q.16) What are the Advantages of offshore wind power over the onshore wind power?

- 1. Greater area for setting up large projects and higher wind speed
- 2. Inconsistent wind speed
- 3. Close to load centers

Choose correct option from below:

- a) 3 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All of the above

Q.16) Solution (c)

Offshore wind power is the use of wind farms constructed in bodies of water, usually in the ocean on the continental shelf, to harvest wind energy to generate electricity

Advantages of offshore wind power over the onshore wind power:

- Greater area for setting up large projects and higher wind speed resulting in higher electricity generation per amount of capacity installed.
- **Consistent wind speed:** The effective use of wind turbine generating capacity will be higher at sea than on land.
- Close to load centers: The off-shore wind farms are usually located near to the cities and load centers thus transmission losses are minimised.
- Less visual impact: As these sites are located far from land they have less visual impact which helps with public acceptance issues.
- Environmental impact: low global warming potential per unit of electricity generated, comparable to that of onshore wind farms.

Q.17) Sustainable agriculture is a concept that involves:

- 1. Mimic natural ecological processes
- 2. Minimize tilling and water use
- 3. Integrating croplands with livestock grazing

- 4. Reliance on monoculture
- 5. Avoid pesticide use and reliance on Bio-control

Choose correct option from below:

- a) 1, 3 and 4 only
- b) 1, 2 and 4 only
- c) 1, 2, 3 and 5 only
- d) All of the above

Q.17) Solution (c)

The concept of sustainable agriculture embraces a wide range of techniques, including organic, free-range, low-input, holistic, and biodynamic.

The common thread among these methods is an embrace of farming practices that mimic natural ecological processes. Farmers minimize tilling and water use, encourage healthy soil by planting fields with different crops year after year and integrating croplands with livestock grazing, and avoid pesticide use by nurturing the presence of organisms that control crop-destroying pests.

Current Industrial approach to agriculture involves: Reliance on monoculture, mechanization, chemical pesticides and fertilizers, biotechnology, Which are not sustainable



Q.18) Consider the following statements about Compensatory Afforestation Fund

Management and Planning Authority (CAMPA):

- 1. NCAFMPA or CAMPA has been created under the Compensatory Afforestation Fund Act 2016
- 2. It establishes national and state compensatory afforestation funds
- 3. The National Fund will receive 25% and the State Funds will receive the remaining 75% of this funds.

Which of the above statement is/are correct?

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

Q.18) Solution (b)

NCAFMPA has been created under the Compensatory Afforestation Fund Act 2016.

It established National Compensatory Afforestation Fund (NCAF) under the Public account of India and State Compensatory Afforestation Funds under public accounts of states.

The National Fund will receive 10% of these funds, and the State Funds will receive the remaining 90%.

These funds will receive payments for: Compensatory afforestation, Net present value of forest (NPV), Other project specific payments.

Q.19) The reason for slow growth of agricultural production in India are:

- 1. Lack of awareness about the treatment of crops
- 2. Low irrigation facilities
- 3. Use of chemical Fertilizers
- 4. Limited access to modern farming technology

Choose correct option from below:

- a) 1 and 2 only
- b) 1, 2 and 4 only
- c) 1, 3 and 4 only
- d) All of the above.

Q.19) Solution (b)

The Rice and cereal yield per hectare in the country is low, lagging far behind countries such as China, Japan and the US. The slow growth of agricultural production in India can be attributed to an inefficient rural transport system, lack of awareness about the treatment of crops, limited access to modern farming technology and the shrinking agricultural land due to urbanization. Add to that, an irregular monsoon and the fact that 63% of agricultural land is dependent on rainfall further increase the difficulties we face.

Q.20) Climate change has profound impact on agriculture. It includes:

- 1. Increase crop growth and crop yields
- 2. Decrease agriculture yield
- 3. Rainfed agriculture will be primarily impacted due to rainfall variability

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All of the above

Q.20) Solution (d)

Higher CO2 levels can affect crop yields. Some laboratory experiments suggest that elevated CO2 levels can increase plant growth.

More extreme temperature and precipitation can prevent crops from growing. Extreme events, especially floods and droughts, can harm crops and reduce yields.

Climate change can have negative effects on irrigated crop yields across agro-ecological regions both due to temperature rise and changes in water availability. Rainfed agriculture will be primarily impacted due to rainfall variability and reduction in number of rainy days.

Q.21) With reference to Joint Forest Management (JFM), consider the following statements:

- 1. It envisages a process of joint management of forests by the central government and the local people
- 2. Non-wood forest products (NWFPs) have a key role in JFM efforts, Leading to sustainable resource utilization and economic development
- 3. JFM program initiated in the context of the National Forest Policy of 1988

Which of the above statement is/are correct?

- e) 1 only
- f) 1 and 2 only
- g) 2 and 3 only
- h) All of the above

Q.21) Solution (c)

Forest is the state subject:

,		
Statement-1: incorrect	Statement-3: correct	Statement-2: correct
The 1988 policy envisages	The Indian Forest Policy of	Non-wood forest products
a process of joint	1988 (MoEF, 1988) and	(NWFPs) have a key role in
management of forests by	the subsequent	JFM efforts. With the
the state governments	government resolution on	increasing awareness of
(which have nominal	participatory forest	their economic potential
responsibility) and the	management (MoEF,	and growing concerns for
local people, which would	1990) emphasize the need	the sustainability of the
share both the	for people's participation	resources and the
responsibility for	in natural forest	distribution of the benefits
managing the resource and	management.	derived from them,
the benefits that accrue		various state governments
from this management.		have taken over control of
		a number of NWFPs.

Q.22) With reference to Integrated Tiger Habitat Conservation Programme (ITHCP), consider the following statements:

- 1. It is Initiated in 2014, ITHCP is a global effort to double tiger numbers in the wild by 2025
- 2. It involves protecting tiger species, preserving tiger habitats and supporting

human populations living in tiger landscapes.

Which of the above statement is/are correct?

- e) 1 only
- f) 2 only
- g) Both 1 and 2
- h) Neither 1 nor 2

Q.22) Solution (b)

Initiated in 2014, the Integrated Tiger Habitat Conservation Programme (ITHCP) or 'Tiger Programme' is a grant-making initiative which contributes to the Global Tiger Recovery Programme (GTRP), **a global effort to double tiger numbers in the wild by 2022.** The programme consists of a portfolio of 12 large-scale projects in key Tiger Conservation Landscapes across Bangladesh, Bhutan, India, Indonesia, Nepal and Myanmar.

The Tiger Programme is based on three pillars:

- Protecting tiger species and their prey from the threat of poaching;
- Preserving tiger habitats, including core habitats, buffer zones and corridors;
- Supporting human populations living in tiger landscapes.

Q.23) The Terai landscape boasts of some of India's most well-known Tiger Reserves and Protected Areas. Arrange the following from west to east:

- 1. Corbett national park
- 2. Rajaji national park
- 3. Valmiki Tiger reserve
- 4. Dudhwa Tiger reserve

Choose correct option from below:

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

Q.23) Solution (b)



Q.24) Consider the following with respect to Red List of Ecosystems:

- 1. It is tool of IUCN, It categorises a global standard for how we assess the status of ecosystems, applicable at local, national, regional and global levels.
- 2. Applicable only to terrestrial and marine ecosystems
- 3. It also demonstrate how improved ecosystem management can reduce risks, enhance resilience, and be a means for adaptation.

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) All of the above

Q.24) Solution (b)

Statement-1: correct	Statement-2: incorrect	Statement-3: correct
The Red List of Ecosystems is	Applicable to	With climate change and
developed and implemented	terrestrial, marine,	increased risks of disasters, we
jointly by the IUCN	freshwater and	urgently need criteria at the
Commission on Ecosystem	subterranean systems.	ecosystem level to not only
Management (CEM) and the	Applicable from local	raise awareness about their
IUCN Ecosystem Management	and global, and from	threats, but to also
Programme (EMP), in	very small (fine	demonstrate how improved
collaboration with the IUCN	resolution) to very	ecosystem management can
Species Survival Commission	large (coarse	reduce risks, enhance
(SSC) and the IUCN Global	resolution) scales.	resilience, and be a means for
Species Programme (GSP).		adaptation.

Q.25) Post-2020 global biodiversity framework is related with?

- a) UN Biodiversity Summit.
- b) IUCN
- c) Paris Agreement
- d) Birdlife International

Q.25) Solution (a)

In October 2020 governments will come together to adopt a post-2020 global biodiversity framework, at the Convention on Biological Diversity (CBD) Conference of the Parties (COP 15) in Kunming, China – the UN Biodiversity Summit.

This 2020 deal for nature and people is a stepping stone towards achieving the CBD 2050 Vision of 'Living in harmony with nature'. It will replace and must improve on the Strategic Plan for Biodiversity 2011-2020, which has failed to stem the devastating decline in biodiversity.

Q.26) Protected Planet is a project of?

- 1. IUCN
- 2. UNEP
- 3. UNCCD
- 4. UNFCCC

Choose correct option from below:

- a) 1 and 2 only
- b) 3 Only
- c) 1 and 3 only
- d) All of the above

Q.26) Solution (a)

Protected Planet is the online visual interface for the World Database on Protected Areas (WDPA), a joint project of IUCN and UNEP. It is the most comprehensive global database on terrestrial and marine protected areas based on data that has been compiled since 1981 working with governments and NGOs. The visual interface reconciles governmental, expert and general public opinions on protected areas.



Q.27) Consider the following statements:

- 1. Intraspecific diversity refers to number and types of different species
- 2. Interspecific diversity refers to the genetic variety within a single species

Which of the above pairs is/are correct?

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

Q.27) Solution (d)

Biodiversity can be divided into two categories:

- Intraspecific diversity covers the genetic variety within a single species such as different sub-species of rice, Basmati rice, Thai Jasmine rice, Japanese Mochi rice, Sona Masuri, etc.
- Interspecific diversity refers to the number and types of different species such as potatoes, carrots, peppers, lettuce etc.

Q.28) The conservation of agro-biodiversity in crop production systems is important. In the above context, Agro-biodiversity helps in?

- 1. Increase productivity, food security and economic returns
- 2. Make farming systems more stable and sustainable
- 3. Contribute to increase in pest and diseases
- 4. Conserve ecosystem structure and stability of species diversity

Which of the above statement is/are correct?

- a) 1 and 2 only
- b) 2, 3 and 3 only
- c) 1, 2 and 4 only
- d) All of the above

Q.28) Solution (c)

Agro-biodiversity helps in various ways such as:

- Increase productivity, food security and economic returns
- Reduce the pressure of agriculture on fragile areas, forests and endangered species
- Make farming systems more stable and sustainable
- Contribute to pest and disease management
- Reduce the spread of diseases to individuals and nations
- Improve human nutrition and provide sources of medicines
- Conserve ecosystem structure and stability of species diversity

Q.29) Consider the following statements:

- 1. Seed banks are created to maintain and protect biodiversity
- 2. Seed banks primarily involve in selecting, collecting, and storing seed varieties.

3. Seed Banks are In-Situ form of Biodiversity Conservation

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) All of the above

Q.29) Solution (b)

A seed bank is a type of gene bank where seeds of different crops and rare plant species are stored for future use. Seed banks are created to maintain and protect biodiversity, where samples of all species are collected and stored. **Seed Banks are Ex-Situ form of**

conservation

Seed banks primarily involve in selecting, collecting, and storing seed varieties. They also form seed exchange networks with government organizations, NGOs and community seed banks across the world.

Q.30) With reference to the Global Wildlife Program, consider the following statements:

- 1. It intends to wildlife conservation and wildlife crime prevention
- 2. It is launched by TRAFFIC

Which of the above pairs is/are incorrect?

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

Q.30) Solution (b)

The Global Wildlife Program (GWP) is a World Bank-led, GEF-funded global partnership that promotes wildlife conservation and sustainable development by combatting illicit trafficking in wildlife. Phase II of the Global Wildlife Program (GWP) was approved by the Global Environment Facility (GEF) Council in June 2019.

Q.31) Consider the following pairs:

Species State

- 1. Snow leopard : Arunachal Pradesh
- 2. Black Panther : Uttarakhand
- 3. Asiatic Lion : Gujrat
- 4. Impressed Tortoise : Kerala

Which of the above is/are incorrectly matched?

- a) 1 only
- b) 2 and 4 only
- c) 1 and 2 only
- d) None of the above

Q.31) Solution (b)

Wildlife of India offers variety of animal life and the country is home to thousands of different species of wild animals, reptiles and birds. The natural habitat of Indian wildlife and dense forest provide shelter to unique, rare, few endemic and endangered species of animals

Animal	Habitat
Asiatic Lion	Gir forest National park, Gujrat
Black Panther	Karnataka, Maharastra, Assam
	forests
Snow Leopard	High Altitudes of Uttarakand,
	Jammu and Kashmir, Sikkim,
	Arunachal Pradesh
Clouded Leopard	Sikkim, Manipur, Nagaland,
	Mizoram
Sloth Bear	Kartnataka
Impressed Tortoise	Arunachal Pradesh

Q.32) Which of the following organizations were established under the provisions of the Wildlife (Protection) Act, 1972?

- 1. Central Zoo authority
- 2. Nation Tiger conservation Authority
- 3. National Board for Wildlife
- 4. Animal welfare Board for India
- Choose correct option from below:
 - a) 1 and 3 only
 - b) 1, 2 and 3 only
 - c) 2,3 and 4 only
 - d) All of the above

Q.32) Solution (b)

The Wildlife (Protection) Act, 1972 is the most important act regarding wildlife conservation in India. It prohibits the capturing, killing, poisoning or trapping of wild animals.

It has the following objectives: prohibition of hunting; protection and management of wildlife habitats; establishment of protected areas; regulation and control of trade in parts and products derived from wildlife and management of zoos.

- Animal Welfare Board of India is a statutory advisory body on Animal Welfare Laws and promotes animal welfare in the country. It was established in 1962 under Section 4 of the Prevention of Cruelty to Animals Act, 1960.
- NTCA, ZOO AUTHORITY AND NATONAL BOARD FOR WILDLIFE are established

under the ambit of Wildlife (Protection) Act, 1972 through various Amendmend

Q.33) Which of the following are Invasive Alien Species in India?

- 1. Parthenium hysterophorus
- 2. Achatina fulica
- 3. Papaya Mealy Bug
- 4. Amazon sailfin catfish

Which of the above statement is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 3 and 4 only
- d) All of the above

Q.33) Solution (d)

The Zoological Survey of India (ZSI) has for the first time compiled a list of 157 alien invasive animal species.

Alien species become "invasive" when they are introduced deliberately or accidentally outside their natural areas where they displace the native species and upset the ecological balance. These invasive animal species pose a threat to the biodiversity of the area and human welfare and safety, also harming the agriculture and biodiversity.

- **Parthenium hysterophorus:** colloquially known as Congress grass, is believed to have been introduced into India and Australia from North America.
- African apple snail (Achatina fulica): The most invasive among all alien fauna in India, this mollusc was first reported in the Andaman and Nicobar Islands. It is now found across country and is threatening the habitat of several native species.
- Papaya Mealy Bug (Paracoccus marginatus): Native of Mexico and Central America, it is believed to have destroyed huge crops of papaya in Assam, West Bengal and Tamil Nadu
- **Amazon sailfin catfish (Pterygoplichthys pardalis):** This species is responsible for destroying the fish population in the wetlands of Kolkata.

Q.34) The sanctuary is situated in chorao Island along the river Mandovi in Goa. Indain Giant Squirral can be spoted here. The above mentioned Sanctury is?

- a) Merces Bird Sanctuary
- b) Salim Ali bird sanctuary
- c) Kumarakom Bird Sanctuary
- d) Kaundinya Bird Sanctuary

Q.34) Solution (b)

The Salim Ali bird sanctuary is home to many varieties of local and migratory birds, situated in chorao Island along the river Mandovi in Goa. Salim Ali Bird sanctuary is one of the best known bird sanctuaries and very famous bird sanctuary in India. It is one of

the smallest bird sanctuaries where flying Sparrows, Beautiful peafowl, Parrots, pelican, Indian giant squirral and other rare species of fauna can be spotted.

Q.35) Consider the following pairs:

Wildlife sanctuaries States

- 1. Kumarakom Bird Sanctuary : Kerala
- 2. Ranganthittu : Andhra Pradesh
- 3. Sariska National Park : Madhya Pradesh
- 4. Indira Gandhi National Park : Tamil Nadu

Which of the above is/are correctly matched?

- a) 1 only
- b) 2 and 4 only
- c) 1 and 4 only
- d) All of the above

Q.35) Solution (c)

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Q.36) Consider the following pairs: National Parks Rivers

- 1. Mouling national park : Siyom
- 2. Orang National park : Lohit
- 3. Valmiki national park : Ganga
- 4. Panna National park : Ken

Which of the above is/are incorrectly matched?

- a) 1 only
- b) 1 and 4 only
- c) 2 and 3 only
- d) None of the above

Q.36) Solution (c)

NATIONAL PARKS	RIVERS
Mouling National Park, Arunachal	Siyom
Pradesh	
Debra Saikhowa National Park in Assam	Brahamaputra, Lohit, dibru
Orang National Park in Assam	Brahamaputra
Valmiki National Park in Bihar	Gandak

Panna National Park in M.P	Ken
Jim Corbett National Park in Uttarakhand	Ranganga
Bhitarkanika National Park	Brahmani and Baitrani River Delta

Q.37) Consider the following statements:

- 1. Wildlife sanctuaries may be government owned or can be private controlled
- 2. National parks are reserved areas, owned by the government
- 3. Biosphere reserves are Notified area which may cover multiple protected areas

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) All of the above

Q.37) Solution (d)

Protected areas	Characteristics
Wildlife Sanctuary	 It is natural area which is reserve by a governmental or private agency for the protection of particular species Only animals are conserved, Could be private property also, outside activities allowed International Union for Conservation of Nature (IUCN) has defined its Category IV type of protected areas
National Park	 Reserve area of land, owned by the government Area is protected from human exploitation, industrialization and pollution. International Union for Conservation of Nature (IUCN), and its World Commission on Protected Areas, has defined its Category II type of protected areas
Biosphere Reserve	 Notified areas which cover a larger area of land which may cover multiple National Parks, Sanctuaries and reserves as well. Three areas: Core, Buffer & Marginal. No outside Species allowed Conservation & research purpose

Q.38) Atkinson Index, Generalised Entropy Index. This terms are related to?

- a) Income Inequality
- b) Biodiversity
- c) Conservation efforts

d) Agricultural diversity

Q.38) Solution (a)

- 1. Atkinson's inequality measure (or Atkinson's index): This is the most popular welfare-based measure of inequality. It presents the percentage of total income that a given society would have to forego in order to have more equal shares of income between its citizens.
- 2. Theil index and General Entropy (GE) measures: The values of the GE class of measures vary between zero (perfect equality) and infinity (or one, if normalized). A key feature of these measures is that they are fully decomposable, i.e. inequal- ity may be broken down by population groups or income sources or using other dimensions, which can prove useful to policy makers

Q.39) With reference to the recently adopted European Green Deal, which of the following statements is/are correct?

- 1. It aims to achieve net carbon neutrality among its member countries by 2050
- 2. It was adopted as a part of the Conference of Parties (COP) 25 conference in Madrid

Which of the above statement is/are correct?

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

Q.39) Solution (a)

In the background of the failure of the global community to reach any agreement in the recently concluded COP 25, **the European Union (EU)** has come up with a climate action plan known as the European Green Deal. It is not part of COP-25. It aims to achieve carbon neutrality by 2050.

Q.40) Which of the Factors are responsible for Extinction of species?

- 1. Changes to Habitat
- 2. Poor reproductive trends
- 3. Introduction of Invasive species
- 4. Land use changes

Choose correct option from below:

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

- c) 1 and 4 only
- d) All of the above.

Q.40) Solution (d)

Extinction happens when environmental factors or evolutionary problems cause a species to die out. To some extent, extinction is natural. Changes to habitats and poor reproductive trends are among the factors that can make a species' death rate higher than its birth rate for long enough that eventually, none are left.

Humans also cause other species to become extinct by hunting, overharvesting, introducing invasive species to the wild, polluting, and changing wetlands and forests to croplands and urban areas. Even the rapid growth of the human population is causing extinction by ruining natural habitats.

