#### Q.1) Consider the following statements with respect to concept of "Negative emissions".

- 1. It means removing CO2 from the atmosphere and storing it on land, underground or in the oceans.
- 2. This are gases with high warming potential, which poses greater threat in controlling climate change.

#### 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.1) Solution (a)

The Paris Agreement, adopted at the COP21 climate talks in December, sets out a global aim to limit average global surface temperatures to "well below 2C" above pre-industrial levels. It adds that there should be "efforts" to limit it to 1.5C.

A study published last year wa<mark>rned that all the scenarios for keeping global temperature rise to 2C require "negative emissions" – removing CO2 from the atmosphere and storing it on land, underground or in the oceans.</mark>

### Q.2) The report titled "Ocean deoxygenation is released by?

- a) UNEP
- b) IPCCC
- c) UN CLIMATE
- d) IUCN

#### Q.2) Solution (d)

Recently, a report titled, 'Ocean deoxygenation: Everyone's problem' was released by the International Union for Conservation of Nature (IUCN).

Ocean deoxygenation is one of the most pernicious, yet under-reported side-effects of human-induced climate change. The primary causes of deoxygenation are eutrophication (increased nutrient run-off from land and sewage pollution) and nitrogen deposition from the burning of fossil fuels, coupled with the widespread impacts from ocean warming. Oxygen loss from warming has alarming consequences for global oceanic oxygen reserves, which have already been reduced by 2% over a period of just 50-years (from 1960 to 2010).

## Q.3) With respect to increasing Marine pollution, What are the impacts of global warming and pollution of water bodies?

- 1. Rise in sea surface temperature
- 2. Ocean deoxygenation

- 3. Decrease in oxygen demand of oceans
- 4. Formation of Gas Hydrates at bottom of oceans

#### **Choose correct option from below:**

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

#### Q.3) Solution (a)

Climate Change: As the ocean warms due to global warming, it induces Ocean warming-driven deoxygenation.

- Warmer ocean water holds less oxygen and is more buoyant than cooler water. This leads to reduced mixing of oxygenated water near the surface with deeper waters
- Warmer water also raises oxygen demand from living organisms (increases the metabolic rates).
- Warming of bottom waters may result in enhanced destabilization of methane gas hydrates

Nutrient pollution (Eutrophication) - It causes oxygen loss in coastal waters as fertiliser, sewage, animal and aquaculture waste cause excessive growth of algae, which in turn deplete oxygen as they decompose.

## Q.4) What is meant by carbon pricing, recently seen in News?

- 1. It is the cost that companies has to bear to bring clean technology in their production lines.
- 2. It is external costs of carbon emissions, such as damage to crops and health care costs from heat waves and droughts or to property from flooding and sea level rise.

#### 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 (b)

The Carbon pricing phrase put a price on carbon has now become well known with momentum growing among countries and business to put a **price on carbon pollution** as a means of bringing down emissions and drive investment into cleaner options.

There are several paths governments can take to price carbon, all leading to the same result. They begin to capture what are **known as the external costs of carbon emissions** – costs that the public pays for in other ways, such as damage to crops and health care costs from

heat waves and droughts or to property from flooding and sea level rise – and tie them to their sources through a price on carbon.

## Q.5) Consider the following statements with respect to Montreal Protocol on Substances that Deplete the Ozone Layer

- Under Montreal protocol Developing and developed countries have equal but differentiated responsibilities, where developed countries have legally binding targets and developing countries have non-binding targets
- 2. India achieved complete phase out of HCFC-141 b, one of the most potent ozone depleting chemical after Chlorofluorocarbons (CFCs).

#### 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 (b)

The Montreal Protocol is the landmark multilateral environmental agreement that regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone depleting substances (ODS).

- Adopted in 1987, the Protocol is to date the only UN treaty ever that has been ratified by all 197 UN Member States.
- Developing and developed countries have equal but differentiated responsibilities, but both groups of countries have binding, time-targeted and measurable commitments.
- Kigali agreement amended the Montreal Protocol in 2016.

India achieved complete phase out of HCFC-141 b, one of the most potent ozone depleting chemical after Chlorofluorocarbons (CFCs).

## Q.6) Indian cities face the worst Air pollution in the world. What steps can be taken to reduce Air pollution across cities.

- 1. Use of LiDAR Technology to detect and control pollution
- 2. Photocatalytic paints to be used on roads
- 3. Set up 'smog towers'
- 4. Remove Scrubbers from chimneys of Industries

#### **Choose correct option from below:**

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

#### Q.6) Solution (c)

Following technological solutions can be used to fight air pollution:

- Use of Light Detection and Ranging (LiDAR) and Wireless Sensor Networks (WSN) technology for better pollution- monitoring.
- Adoption of oxy furnaces in industries
- Photocatalytic paints to be used on roads
- Use of anti-smog gun

**Scrubbers are air pollution control devices** that use liquid to remove particulate matter or gases from an industrial exhaust or flue gas stream. This atomized liquid (typically water) entrains particles and pollutant gases in order to effectively wash them out of the gas flow.

#### Q.7) Consider the following pairs:

### Conventions/ protocols Pollutants

Gothenburg protocol : Ozone
 Basel convention : Plastic

3. Rotterdam convention : Pesticide Phorate

4. Stockholm Convention: Persistent Organic Pollutants (POP)

#### Which of the above is/are correctly matched?

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

#### Q.7) Solution (d)

Q.7 / Solution (u)			
Conventions/ protocols	Pollutants		
Stockholm Convention	Persistent Organic Pollutants (POP), It was		
	adopted in May 2001 and entered into		
~ ~/ \	force in 2004. It calls for international		
(D) (D)	action on three categories of POPs:		
411	p <mark>esticides, industr</mark> ial ch <mark>e</mark> micals, and		
w C	unintentionally produced POPs		
Rotterdam Convention	Prior Informed Consent Procedure (PIC) for		
	Certain Hazardous Chemicals and Pesticides		
	in International Trade		
Basel Convention	It was adopted in 1989 and entered into		
	force in 1992. Its scope of application		
	covers a wide range of wastes defined as		
	"hazardous wastes" based on their origin		
	and/or composition and their		
	characteristics.		

	Adopted an amendment to include		
	unsorted, mixed and contaminated plastic		
	waste under PIC (Prior Informed Consent)		
	procedure and improve the regulation of its		
	transboundary movement.		
Gothenburg Protocol	It aims to abate Acidification,		
	Eutrophication and Ground-level Ozone and		
	is part of the Convention on Long- Range		
	Transboundary Air Pollution.		

#### Q.8) Consider the following statements with respect to corals:

- 1. Coral reefs have greater biodiversity than tropical rainforests.
- 2. They are only found in tropical oceans and seas.

#### 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.8) Solution (a)

The coral is a polyp, an organism that lives in the shallow sea. Its skeleton is composed of limestone and dolomite. The layers of deposition of the skeletons of these polyps form a shallow rock known as Coral Reef.

- Coral reefs are retreating from equatorial waters and establishing new reefs in more temperate regions, a new study shows. Researchers say during the last four decades, the number of young corals on tropical reefs has declined by 85 percent—and doubled on reefs in the subtropics.
- The coral reefs are more diverse than tropical rainforests because coral reefs have more than 1,000,000 species.

### Q.9) With reference to the agricultural practices, consider the following statements:

- Mulching is the practice of cultivation of leguminous crops between the cropping seasons
- 2. Inter-cropping method involves growing different crops simultaneously within the same plot.
- 3. Strip cropping is growing of two simultaneously which have different growth habits and no competition between them

#### Which of the above statement is/are incorrect?

a) 1 only

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

#### Q.9) Solution (c)

Interespension	Intercorporate involves succeins different		
Intercropping	Intercropping involves growing different		
	crops simultaneously within the same plot		
	of land. This increases the yield and		
	maximizes utilization of abiotic inputs, like		
	efficient use of sunlight, water etc.		
Mulching	Mulches are generally waste plant		
	materials. In mulching, these plant		
	materials are spread around the base of the		
	crops. It protects the soil from erosion,		
	reduces compaction from the impact of		
	heavy rains ,conserves moisture,		
Strip cropping	Strip cropping is growing two or more crops		
	simultaneously in strips, wide enough to		
	permit independent cultivation		
Parallel cropping	Parallel cropping is growing of two crops		
ر تو	simultaneously which have different growth		
7 0	habits and no competition among them.		

# Q.10) Zero Tillage is the central element in what is now widely termed Conservation Agriculture. What are the advantages of zero tillage?

- 1. Improves soil structure and soil cover increase the soil's ability to absorb and infiltrate water
- 2. Soil erosion is reduced by about 90% and soil biological activity is minimized.
- 3. Increases evaporation from the soil

#### 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.10) Solution (a)

Zero Tillage is the central element in what is now widely termed Conservation Agriculture. It brings a quantum leap in crop production technology, for it brings agriculture into harmony with nature.

#### Features:

Crop residues are distributed evenly and left on the soil surface;

- No implements are used to turn the soil over, cultivate it, or incorporate crop residues;
- Weeds and/or purpose-planted cover crops are controlled by a pre-planting application of a non-pollutant desiccant herbicide;
- A specialized planter or drill cuts through the desiccated cover and residues accumulated on the soil surface, slotting seed (and fertilizer) into the soil with minimal disturbance;
- Subsequent weed control is carried out with some pre- but mostly post-emergent herbicides, which also used in conventional tillage;
- Crop rotation is fundamental to Zero Tillage, since this promotes adequate biomass levels for permanent mulch cover; it also assists in the control of weeds, pests and diseases, as well as in improving the physical condition of the soil.
- Soil erosion is reduced by about 90% and soil biological activity and bio-diversity are maximized
- No-till practices also slow evaporation, which not only means better absorption of rainwater, but it also increases irrigation efficiency, ultimately leading to higher yields, especially during hot and dry weather.

## Q.11) Recently, Central Ground Water Board (CGWB) released report on Groundwater Arsenic Contamination in India. In this context, Consider the following statements:

- 1. Peninsular states are worst effected by Arsenic contamination
- 2. Arsenic contamination impacts livestock population
- 3. Sources of arsenic contamination include both natural as well as Anthropogenic

#### 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.11) Solution (c)

Recently, Central Ground Water Board (CGWB) released report on Groundwater Arsenic Contamination in India:

- 21 states across the country have pockets with arsenic levels higher than the Bureau of Indian Standards (BIS) stipulated permissible limit of 0.01 miligram per litre (mg/l).
- The states along the Ganga-Brahmaputra- Meghna (GBM) river basin Uttar Pradesh,
   Bihar, Jharkhand, West Bengal and Assam are the worst affected
- Regular extraction of ground water for irrigation deposits arsenic in soil and consequently its uptake by the crops. Also, paddy farms flooded with contaminated water eventually causes accumulation of arsenic in the food crops.

 Rice husk used as fodder for livestock, exposes them to impacts of arsenic contamination. This leads to potential risk for humans when they consume cattle-based food products

#### Sources of arsenic contamination:

- Natural processes in groundwater: Weathering of rocks and minerals comprising sand, silt and clay, followed by leaching and runoff.
- Anthropogenic activities like intense exploitation of groundwater, application of fertilizers, burning of coal and leaching of metals from coal-ash tailings

#### Q.12) In the context of water scarcity in India, Consider the following statements:

- 1. A water-stressed condition happens when per capita availability is less than 1,700 cubic metres
- 2. Water-scarcity condition when per capita availability falls below 1,000 cubic metres.

#### 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.12) Solution (c)

As per NITI Aayog report, nearly 600 million Indians face "high to extreme water stress" and 75% households do not have drinking water on their premises. 81.67% of rural households do not have tap water connections.

- India's annual per capita availability of water fell from 1,820 cubic meters in 2001 to 1,545 cubic meters in 2011, which may further fall to 1,341 cubic meters in 2025.
- By Central water commission (CWC) benchmarks, a water-stressed condition happens
  when per capita availability is less than 1,700 cubic metres, and a water-scarcity
  condition when per capita availability falls below 1,000 cubic metres.

#### Q.13) Consider the following statements with respect to Jal Jeevan Mission (JJM)

- JJM aims at providing Functional Household Tap Connection (FHTC) to every rural household only by 2024.
- 2. It will focus on integrated demand and supply side management of water

#### 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.13) Solution (c)

JJM aims at providing Functional Household Tap Connection (FHTC) to every rural household (Har Ghar Nal Se Jal) (with service level at the rate of 55 litres per capita per day (lpcd)) by 2024.

This Mission, under the Department of Drinking Water and Sanitation, will focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture.

## Q.14) Consider the following statements with respect to Plastic Waste Management Rules, 2016 (as amended in 2018)

- 1. Defines maximum thickness of plastic carry bags i.e. 50 microns
- 2. Rural areas are brought under the rules
- 3. Responsibility is fixed on street vendors and retailers for controlled use of plastics

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

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

#### Q.14) Solution (b)

Plastic Waste Management Rules, 2016 (as amended in 2018):

- **Defines minimum thickness** of plastic carry bags i.e. **50 microns.** This would increase the cost and the tendency to provide free carry bags would come down.
- Responsibility of local bodies: Rural areas are brought under the rules since plastic has reached rural areas as well. The gram sabhas have been given responsibility of implementation.
- Extended Producer Responsibility: Producers and brand owners have been made responsible for collecting waste generated from their products
- Responsibility of street vendors and retailers: Not to provide such carry bags or fine
  would be imposed. Only the registered shopkeepers on payment of a registration fee to
  local bodies would be allowed to give out plastic carry bags on charge.

## Q.15) With reference to recent All India Tiger estimates, Consider the following statements:

- 1. Karnataka state recorded highest number of Tigers in India
- 2. Continuing Increase of tiger-occupied areas has been recorded.

#### 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.15) Solution (d)

The four-year tiger census report, 'Status of Tigers, Co-predators, Prey and their Habitat, 2018' shows the count of tigers in India, has risen to 2967, in 2018 from 2,226 in 2014 Findings of All India Tiger Estimate-2018:

- Biggest increase in tigers: The biggest increase has been in Madhya Pradesh from 308 in 2014 to 526. Now, MP has most number of tigers.
- Continuing loss of tiger-occupied areas: The net loss in tiger-occupied area is estimated to be 20% of the tiger habitat in four years.
- No tiger was recorded in Buxa (West Bengal), Dampa (Mizoram) and Palamu (Jharkhand) tiger reserves.

## Q.16) Consider the following statements, with respect to Cheetah reintroduction programme.

- 1. Asiatic cheetah is extinct. Hence, India is introducing African
- 2. Cheetah is a keystone species of dry forests, scrub forests, and savannahs.
- 3. Kuno Palpur was the preferred location for introduction of cheetah

#### 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.16) Solution (c)

The plan, first floated in 2009, was to bolster the nearly extinct Indian cheetah population.

- Iran has a sub-species of the Asiatic cheetah but has refused to share them with India, forcing the government to look for African ones.
- In 2010, central government had set up an expert panel for reintroducing cheetah in India. Kuno Palpur was the preferred location for introduction of cheetah. It was also the place prepared by MP to house Asiatic lions
- Cheetah is a keystone species of dry forests, scrub forests, and savannahs.
- IUCN status: African Cheetah- Vulnerable and Asiatic Cheetah Critically endangered (surviving only in Iran).

## Q.17) With reference to tropical and temperate forests diversity, consider the following statements:

1. Temperate forests have a thin canopy of trees whereas tropical forests have a thick

canopy

2. Tropical Forests consists of very high tree species as compared to temperate forests.

#### 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.17) Solution (c)

Flora in temperate forests are characterized by 3-4 tree species per square kilometre while for tropical forests it may be as high as 100 different tree species

- Temperate forests have a thin canopy of trees which allows more light and heat to penetrate and permit the survival of smaller and cold-blooded animals like garter snakes, turtles, and a few amphibians. Tropical forests have a thick canopy of trees which restricts light to penetrate
- Trees of temperate forests are distinguished by broad leaves which shed their leaves annually during the dry season. They include such species as oak, hickory, beech, hemlock, maple, basswood, cottonwood, elm, willow, and spring-flowering herbs. In case of boreal or taiga forests, the trees are cold-tolerant evergreen conifers with needle-like leaves like pine, fir, and spruce. While in tropical forests, trees are 25- 30 m tall, with shallow roots, mostly evergreen, with large dark green leaves. Some examples are orchids, bromeliads, vines (lianas), ferns, mosses, and palms.

## Q.18) With reference to the productivity of an ecosystem, consider the following statements

- 1. Gross primary productivity of an ecosystem is the rate of production of organic matter during photosynthesis.
- 2. Secondary productivity is the available biomass for the consumption to heterotrophs
- Net primary productivity is defined as the rate of formation of new organic matter by consumers

#### 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.18) Solution (a)

Statement-1: correct	Statement-2: incorrect	Statement-3: incorrect
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Gro	oss prim	ary <sub> </sub>	oro	ductiv	/ity
of	an ecosy	stem	is	the r	ate
of	product	ion	of	orga	nic
ma	tter			dur	ing
pho	otosynthe	esis.			Α
cor	nsiderable	e amo	oun	t of G	PP
is	utilized	by	pla	ants	in
res	piration.				

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

Gross primary productivity minus respiration losses, is the net primary productivity (NPP). Net primary productivity is the available biomass for the consumption to heterotrophs (herbivores and decomposers)

#### Q.19) India's Starry Dwarf Frog is found in the region of?

- a) Western Himalayas
- b) Eastern Himalayas
- c) Western Ghats
- d) Andaman and Nicobar island region

#### Q.19) Solution (c)

The thumbnail-sized species was discovered in India's Western Ghats.

- The new species is the only member of an ancient lineage that goes back tens of millions of years and also represents the discovery of a new subfamily
- The researchers have nicknamed them starry dwarf frogs because they're around the size of an adult's thumb, have an orange belly, a brown back and are covered in white spots.

#### Q.20) Which of the following are Critically Endangered Species In India?

- Great Indian Bustard
- 2. Malabar civet
- 3. Ganges shark
- 4. Red headed Vulture
- 5. Pygmy Hog

### **Choose correct option from below:**

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

#### Q.20) Solution (b)

Some of the critically endangered species

Mammals	•	Large Rock Rat or Elvira Rat
---------	---	------------------------------

	Namdapha Flying Squirrel.
	Malabar Civet
	Sumatran Rhinoceros and Javan
	Rhinoceros
Birds	Siberian Crane and Spoon-billed
	Sandpiper
	Bengal Florican
	Great Indian Bustard
	• Indian Vulture, Red-headed Vulture,
	Slender-billed Vulture and
The same of the sa	White-backed Vulture.
Fishes	Pondicherry Shark and Ganges Shark.
	Large-tooth Sawfish and Long-comb
	Sawfish or Narrow-snout Sawfish
Recent changes in the IUCN Red List	Pygmy Hog: Status changed from
	Critically Endangered (CR) to
	Endangered (EN).
	Kondana Rat: Status changed from
12	Critically Endangered (CR) to
( ~ ~ `	Endangered (EN)
1, 9	• Leatherback Turtle: Status changed
٧.	from Critically Endangered (CR) to
	Vulnerable (VU).

# Q.21) Recently 10 wetlands from India were added to the list of 'Wetlands of International Importance'. With reference to Ramsar sites in India, consider the following statements:

- 1. With new additions, the total Ramsar sites in India increased to 36.
- 2. Uttar Pradesh has the highest number of Ramsar sites than other Indian States.
- 3. All Southern States except Goa and Telangana has atleast one Ramsar site in it.

#### Which of the above statement is/are incorrect?

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

d) 1, 2 and 3

#### Q.21) Solution (c)

- Ramsar Convention is formally known as Convention on Wetlands of International Importance, especially as Waterfowl Habitat.
- Ramsar Convention has two fold objectives viz. Conservation and sustainable utilization of wetlands; and stop the encroachment and loss of wetlands.
- The 10 new Ramsar sites are:
  - Nandur Madhameshwar, a first for Maharashtra.
  - Keshopur-Miani, Beas Conservation Reserve and Nangal in Punjab.
  - Nawabganj, Parvati Agra, Saman, Samaspur, Sandi and Sarsai Nawar in Uttar
     Pradesh.

Statement 1	Statement 2	Statement 3
Incorrect	Correct	Incorrect
India has added 10	Uttar Pradesh	In southern State, there is no Ramsar site
more wetlands to the	with 7 sites is the	in Karnataka, Goa and Telangana. Kerala
list of 27 Ramsar sites in	State has the	has 3 (Ashtamudi Wetland, Sasthamkotta
India. With this, a <b>total</b>	highest number of	Lake Vembanad-Kol Wetland), Tamil Nadu
of 37 sites in the India	Ramsar sites,	(Point Calimere), Maharashtra (Nandur
have been recognised	followed by	Madhameshwar) and Andhra Pradesh
under the international	Punjab with 6	(Kolleru) has one each.
treaty.	sites.	3-76

# Q.22) The World Economic Situation and Prospects (WESP) Report is a annual publication of

- a) World Economic Forum (WEF)
- b) Organisation of Economic Cooperation and Development (OECD)
- c) United Nations (UN)
- d) World Bank

#### Q.22) Solution (c)

- World Economic Situation and Prospects (WESP) Report is an annual UN flagship publication on the state of the world economy, viewed through the lens of the 2030 Agenda for Sustainable Development.
- It is released jointly by United Nations Department of Economic and Social Affairs (UN/DESA), United Nations Conference on Trade and Development (UNCTAD) and the five United Nations regional commissions

#### Q.23) The term 'Drosophila' seen in news is a

- a) Digital Currency
- b) Model Organism in research
- c) Invasive Alien Species
- d) Computer Malware

#### Q.23) Solution (b)

- 5th Edition of Asia Pacific Drosophila Conference was held at Pune. It is being organised in the country for the first time by the Indian Institute of Science Education and Research, Pune.
- It is a biennial conference and it aims to promote the interaction of Drosophila researchers in the Asia-Pacific region with their peers in the rest of the world.
- Drosophila is a genus of two-winged flies commonly known as fruit flies. Drosophila
  is one of the most widely-used and preferred model organisms in biological
  research across the world for the last 100 years.
- Its genome is entirely sequenced and there is enormous information available about its biochemistry, physiology and behaviour,
- Approximately 60% of a group of readily identified genes that are mutated, amplified, or deleted in a diverse set of human diseases have a counterpart in Drosophila.

#### Q.24) Consider the following statement about Blue Dot Network:

- 1. It is a multi-stakeholder initiative to bring together governments, the private sector and civil society.
- 2. It is expected to serve as a globally recognised evaluation and certification system for marine ecosystem restoration techniques.

### 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.24) Solution (a)

Statement 1	Statement 2
Correct	Incorrect
Blue Dot Network is a multi-stakeholder	It is expected to serve as a globally
initiative to bring together governments, the	recognised evaluation and
private sector and civil society to promote	certification system for roads, ports
high-quality, trusted standards for global	and bridges with a focus on the
infrastructure development. The BDN was formally	Indo-Pacific region. Infrastructure
announced on 4th November, 2019 at the	projects would be graded on debt,
Indo-Pacific Business Forum in Bangkok, Thailand. It	environmental standards, labour
will be led by the US along with Japan and Australia.	standards etc.

#### Q.25) Consider the following pairs:

Multilateral Conference	Host country
-------------------------	--------------

1. Shangri-La Dialogue	China
2. Raisina Dialogue	India
3. Sagarmatha Sambaad	Bangladesh

#### Which of the pairs given above are incorrectly matched?

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

#### Q.25) Solution (d)

Pair 1	Pair 2	Pair 3
Incorrect	Correct	Incorrect
Raisina Dialogue of	Raisina Dialogue 2020 is	Sagarmatha Sambaad is an initiative of
India is designed on	a multilateral conference	the Government of <b>Nepal</b> to host
the lines of	committed to addressing	a permanent biennial global dialogue
Singapore's	the most challenging	starting from 2020. It is
Shangri-La	issues facing the global	a multi-stakeholder dialogue forum
Dialogue.	community, held	committed to deliberate on the most
	annually in <b>New Delhi</b> .	prominent issues of global, regional and
55	~~	national significance.

### Q.26) 'Laspeyres Index' is associated with

- a) Volatility in a stock market
- b) Consumer Price Index
- c) Unemployment due to Recession
- d) Non-Performing Assets

#### Q.26) Solution (b)

Laspeyres Index is a methodology to calculate the consumer price index by measuring the

change in the price of the basket of goods to the base year.

#### THINK!

• Paasche's Index

#### Q.27) The 'Shatrughan Chauhan Supreme Court Judgement is associated with

- a) Mercy Petitions
- b) Right to Marry
- c) Right to Property
- d) Right to Privacy

#### Q.27) Solution (a)

In the Shatrughan Chauhan case, the rejection of mercy petitions by the President was challenged on the grounds of undue delay in disposal of their mercy petitions, mental illness, and solitary confinement as supervening grounds.

Undue delay by the President in rejecting mercy to a death row convict amounts to torture. Such inordinate and unexplained delay by the President is sufficient in itself to entitle the convict to a commutation.

# Q.28) Consider the following statements with respect to 'Organisation for the Prohibition of Chemical Weapons (OPCW)'

- 1. The OPCW has the power to say whether chemical weapons were used in an attack it has investigated.
- 2. It is an agency of the United Nations and has a seat in the Hague, Netherlands.

#### Select the correct statements

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

#### Q.28) Solution (a)

The OPCW, with its 193 member states, has its seat in The Hague, Netherlands, and oversees the global endeavour for the permanent and verifiable elimination of chemical weapons. The organisation is not an agency of the United Nations, but cooperates both on policy and practical issues.

The OPCW has the power to say whether chemical weapons were used in an attack it has

investigated.

#### Q.29) Consider the following statements with respect to 'Biological Weapons Convention'.

- It prohibits use but not possession or development of chemical and biological weapons.
- 2. It was registered in League of Nations Treaty Series in 1929.

#### Select the correct statements

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

#### Q.29) Solution (d)

The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction was the first multilateral disarmament treaty banning the production of an entire category of weapons. It was opened for signature on 10 April 1972 and entered into force 26 March 1975

### Q.30) 'Tal Chhapar Sanctuary' is located in

- a) Gujarat
- b) Madhya Pradesh
- c) Rajasthan
- d) Maharashtra

#### Q.30) Solution (c)

Tal Chhapar Sanctuary is a sanctuary located in the Churu district of Northwestern Rajasthan.