Q.1) Consider the following

1. Grassland
2. Wetland
3. Mangroves
4. Estuary
5. Riparian Zone

Which of the above are Ecotone Regions or Transitional Zones?

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

Q.1) Solution (c)

An ecotone is a zone of junction or a transition area between two biomes [diverse ecosystems]. It is where two communities meet and integrate.

For e.g. the mangrove forests represent an ecotone between marine and terrestrial ecosystem. Other examples are grassland (between forest and desert), estuary (between fresh water and salt water) and river bank or marsh land (between dry and wet).

An ecotone may appear on the ground as a gradual blending of the two communities across a broad area, or it may manifest itself as a sharp boundary line.

A riparian zone or riparian area is the interface between land and a river or stream.

Q.2) You are trying to protect a National Park/Sanctuary from various pressures including a dam proposal and widening of a highway. Consider the following regarding this:

1. You can directly approach National Green Tribunal in regard to your case
2. You must have a lawyer to represent you for this case in front of National Green Tribunal

Which of the above is/are correct w.r.t rules and procedure to approach National Green Tribunal?

a) 1 Only
b) 2 Only
c) Both

d) None

Q.2) Solution (d)

Unfortunately both are wrong :P Why?

Because NGT is not empowered to hear matters pertaining to issues coming under the ambit of the Wildlife (Protection) Act, 1972, which is applicable in case of National Parks, Sanctuaries and Tiger Reserves. It would be appropriate to approach either the High Court in your State or the Supreme Court. Please consult a competent lawyer for advice.

The NGT has the power to hear all civil cases relating to environmental issues and questions that are linked to the implementation of laws listed in Schedule I of the NGT Act. These include the following:

- The Water (Prevention and Control of Pollution) Act, 1974;
- The Water (Prevention and Control of Pollution) Cess Act, 1977;
- The Forest (Conservation) Act, 1980;
- The Air (Prevention and Control of Pollution) Act, 1981;
- The Environment (Protection) Act, 1986;
- The Public Liability Insurance Act, 1991;
- The Biological Diversity Act, 2002.

This means that any violations pertaining only to these laws, or any order / decision taken by the Government under these laws can be challenged before the NGT. Importantly, the NGT has not been vested with powers to hear any matter relating to the Wildlife (Protection) Act, 1972, the Indian Forest Act, 1927 and various laws enacted by States relating to forests, tree preservation etc. Therefore, specific and substantial issues related to these laws cannot be raised before the NGT. You will have to approach the State High Court or the Supreme Court through a Writ Petition (PIL) or file an Original Suit before an appropriate Civil Judge of the taluk where the project that you intend to challenge is located.

Q.3) Which of the following correctly defines 'Bio-mining'?

a) Use of genetic information of ores to extract minerals
b) Extraction of minerals using enzymes
c) Use of microorganisms in the recovery of minerals from ores
d) Use of biomedical devices in the recovery of minerals from ores

Q.3) Solution (c)

Biomining is an approach to the extraction of desired minerals from ores.

Microorganisms are used to leach out the minerals, rather than the traditional methods of extreme heat or toxic chemicals, which have a deleterious effect on the environment.

In news: http://www.thehindu.com/news/cities/Tiruchirapalli/Bio-mining-helps-in-tackling-garbage-problem/article16438953.ece

Q.4) Certain special conditions which are necessary prerequisites for the growth and development of corals. Consider the following in this regard:

1. For the growth and development of corals the surface temperature of the ocean must be below 20°C
2. Shallow continental shelf
3. Corals need saltwater to survive
4. Low sediments
5. If the salinity of the ocean water is very high, the lime content is bound to be low, which is favourable for the growth of corals

Select the correct code

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

Q.4) Solution (c)

There are certain special conditions which are necessary prerequisites for the growth and development of corals. That is why the reef building corals and their associates are not uniformly deposited throughout the tropical warm ocean waters.

For the growth of corals in such large numbers, as is necessary to give rise to coral deposits, there must be a reasonable balance of favourable conditions. The most important of these conditions are the following:

1. For the growth and development of corals the surface temperature of the ocean must be above 20°C. Corals cannot live if the temperature of the sea water falls below this.

2. The water must be shallow, with a depth not exceeding 25-30 fathoms. As we know, with increasing depth, the amount of calcium as well as the temperature of water goes on decreasing, so that the coral polyps and other sea creatures which live on calcium carbonate

do not thrive. That is why the reef building corals live in shallow waters and on the surface of the seas.

3. The water must be normally saline, and, therefore, along the ocean margins where the water becomes fresh by the inflow of rivers, reef building corals do not grow and develop.

4. Corals need clear water that is free from abundant sediments. That is why coral reefs cannot develop where rivers enter the sea or where wave-erosion causes muddy coastal water.

5. There must be adequate food supply to nourish the abundant life of the coral reef. The most favourable condition for this purpose is the presence of continuously flowing ocean currents which provide to the stationary reef building organisms the much needed food supply.

For example, extensive coral reefs are found on the east coasts of Australia, Central America, and Africa, which are washed by warm ocean currents flowing along them. On the contrary, corals are found only in scattered patches on the west coasts of these continents.

6. If the salinity of the ocean water is very high, the lime content is bound to be low, which is not favourable for the growth of corals. Therefore the average salinity ranging from 27% to 40% is ideal for the proper growth of corals and other reef forming creatures.

7. The most essential prerequisite for the formation of coral reefs is the presence of sub-marine platforms which must lie near the sea shore, or should be attached to some islands. The depth of water on such platforms should not exceed 50 fathoms. Remember that the corals build their permanent colonies only on these platforms.

8. Another point to remember is that corals cannot live for long out of water, and are therefore, rarely found above the low-tide level. On the other hand, their growth is retarded at depths much exceeding 25 or 30 fathoms.

9. Corals need clear oxygenated water with sufficient supplies of microscopic life as food.

10. Since food supplies are plentiful on the seaside of a growing reef, the corals tend to grow rather at a fast rate outwards.

As the reefs grow in size, waves wash much broken corals in the form of boulders and sand over the crest, thus building up a reef-flat, often with sand dunes, upon which vegetation may grow. Coconut palms add special beauty to these 'Coral Islands'.

It should be borne in mind that "the reefs and atolls are easily 'drowned' if their upward growth cannot keep place with any submergence (eustatic or tectonic) that may be in progress."

As regards the rate of growth of corals, it depends on the species, the range being 6 to 45 mm per year. However, according to Arthur Holmes, the average rate of reef growth is about 14 mm a year.

Q.5) 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. Food chains are found within the populations of a species.
3. 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) 1 and 2 only
c) 1, 2 and 3
d) None

Q.5) Solution (a)

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

Food chains are found within the populations of a species. (Man won't eat man – so, false)

A food chain illustrates the numbers of each organism which are eaten by others (it is wrong) **Note:** Food web illustrates the number not the food chain)

Q.6) The ecological footprint is a measure of human demand on the Earth's ecosystems. It measures-

1. How much of the biological capacity of the planet is demanded by a given human activity or population
2. Ecological Footprints is calculated for overall activity of a nation or population and activities such as industrialization etc.
3. The disadvantage of Ecological Footprint is that it cannot be calculated for individual people or area.

Select the incorrect statement/s

a) 1 and 2
b) Only 2
c) 1 and 3

d) Only 3

Q.6) Solution (d)

The Ecological Footprint is a resource accounting tool that measures how much biologically productive land and sea is used by a given population or activity, and compares this to how much land and sea is available. Productive land and sea areas support human demands for food, fibre, timber, energy, and space for infrastructure. These areas also absorb the waste products from the human economy. The Ecological Footprint measures the sum of these areas, wherever they physically occur on the planet. The Ecological Footprint is used widely as a management and communication tool by governments, businesses, educational institutions, and non-governmental organizations.

Ecological Footprint accounts answer a specific research question: how much of the biological capacity of the planet is demanded by a given human activity or population? To answer this question, the Ecological Footprint measures the amount of biologically productive land and water area an individual, a city, a country, a region, or all of humanity uses to produce the resources it consumes and to absorb the waste it generates with today's technology and resource management practices. This demand on the biosphere can be compared to biocapacity, a measure of the amount of biologically productive land and water available for human use. Biologically productive land includes areas such as cropland, forest, and fishing grounds, and excludes deserts, glaciers, and the open ocean

Ecological Footprints can be calculated for individual people, groups of people (such as a nation), and activities (such as manufacturing a product).

The Ecological Footprint of a person is calculated by considering all of the biological materials consumed, and all of the biological wastes generated, by that person in a given year. These materials and wastes each demand ecologically productive areas, such as cropland to grow potatoes, or forest to sequester fossil carbon dioxide emissions. All of these materials and wastes are then individually translated into an equivalent number of global hectares.

Q.7) Consider the statements regarding 'Coral bleaching'

1. It is the loss of zooxanthellae through either expulsion or loss of algal pigmentation.
2. It happens due to increase in ocean temperature only
3. All the corals undergoing bleaching are dead corals

Select the correct code

a) 1 and 3
b) Only 2
c) Only 1
d) 2 and 3

Q.7) Solution (c)

First statement is true. Coral bleaching not only happens because of warm temperature but can also happen due to Cold temperature. Not all bleaching events are due to warm water. In January 2010, cold water temperatures in the Florida Keys caused a coral bleaching event that resulted in some coral death. Water temperatures dropped 12.06 degrees Fahrenheit lower than the typical temperatures observed at this time of year. Researchers will evaluate if this cold-stress event will make corals more susceptible to disease in the same way that warmer waters impact corals.

When a coral bleaches, it is not dead. Corals can survive a bleaching event, but they are under more stress and are subject to mortality.

http://www.theaustralian.com.au/news/nation/great-barrier-reef-scientists-exaggerated-coral-bleaching/news-story/99810c83f5a420727b12ab255256774b

Q.8) Consider the following

1. Ocean
2. Grasslands
3. Lakes
4. Mangroves

Which one of the following is the correct sequence of ecosystems in the order of increasing productivity?

a) Oceans, lakes, grasslands, mangroves
b) Mangroves, oceans, grasslands, lakes
c) Mangroves, grasslands, lakes, oceans
d) Oceans, mangroves, lakes, grasslands

Q.8) Solution (a)

Mangroves are high productivity ecosystem. And since it is asked for increasing order, only option (a) has mangrove in the last.

Q.9) Which of the floral groups are not found in India?

1. Lichens
2. Bryophytes
3. Pteridophytes
4. Gymnosperms
5. Angiosperms

Select the correct answers

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

Q.9) Solution (b)

All the floral groups found in India. Simple examples can be read from class 9 NCERT

Q.10) The migration pattern Amur Falcon, known to be one of the longest distances undertaken by migratory birds has been one of the interesting fields of research among scientists and ornithologists. Identify the regions where Amur Falcon travels during its migration?

1. South Africa
2. China
3. Siberia
4. Rajasthan
5. Nagaland

Select the correct code

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

Q.10) Solution (d)

The bird breeds in south-eastern Siberia and northern China before migrating in large flocks across India and over the Arabian Sea to winter in southern Africa.

It has been spotted in Rajasthan recently.

The birds that usually travelled through Maharashtra and Gujarat, were for the first time spotted in Rajasthan in early May

The entire migration route of Amur falcons from Nagaland to South Africa, Mongolia and back to Nagaland has been scientifically plotted. Scientists now have confirmed that a satellite-tagged Amur falcon 'Naga' has travelled through Rajasthan.

The Amur falcon — a marathon flier whose migrations stretch from the icy environs of Siberia to the outcrops of South Africa — has been spotted in rare areas across the State **(Spotted in Ballari, Kodagu, and the urban sprawls of Mysuru)**

Q.11) Bio-magnification refers to increase in concentration of a pollutant from one link in a food chain to another. Consider the conditions in order for bio-magnification to occur

1. The pollutant must be short-lived
2. The pollutant should be biologically active
3. The pollutant must not be mobile
4. The pollutant should have higher solubility in water

Which of the above are incorrect?

a) 1, 3 and 4
b) 1 Only
c) 1, 2, 3 and 4
d) None of the above

Q.11) Solution (a)

We are concerned about these phenomena because together they mean that even small concentrations of chemicals in the environment can find their way into organisms in high enough dosages to cause problems. In order for biomagnification to occur, the pollutant must be:

- long-lived
- mobile
- soluble in fats
- biologically active

If a pollutant is short-lived, it will be broken down before it can become dangerous. If it is not mobile, it will stay in one place and is unlikely to be taken up by organisms. If the pollutant is soluble in water it will be excreted by the organism. Pollutants that dissolve in fats, however, may be retained for a long time. It is traditional to measure the amount of pollutants in fatty tissues of organisms such as fish. In mammals, we often test the milk produced by females, since the milk has a lot of fat in it and because the very young are often more susceptible to damage from toxins (poisons). If a pollutant is not active biologically, it may biomagnify, but we really don't worry about it much, since it probably won't cause any problems.

Q.12) As per the notification of Ministry of Environment and Forests, the coastal land up to 500m from the High Tide Line (HTL) and a stage of 100m along banks of creeks, estuaries, backwater and rivers subject to tidal fluctuations, is called the Coastal Regulation Zone(CRZ). Consider the following regarding CRZ

1. The area up to 200 metres from the High Tide Line is earmarked as No Development Zone
2. Fishing and allied activities are permitted in CRZ-IV

Which of the above is/are correct?

a) 1 Only
b) 2 Only
c) Both
d) None

Q.12) Solution (c)

CRZ-1: these are ecologically sensitive areas these are essential in maintaining ecosystem of the coast. They lie between low and high tide line. Exploration of natural gas and extraction of salt are permitted

CRZ-2: these areas form up to the shore line of the coast. Unauthorised structures are not allowed to construct in this zone.

CRZ-3: rural and urban localities which fall outside the 1 and 2. Only certain activities related to agriculture even some public facilities are allowed in this zone

CRZ-4: this lies in aquatic area up to territorial limits. Fishing and allied activities are permitted in this zone. Solid waste should be let off in this zone.

http://envfor.nic.in/legis/crz/crznew.html

Q.13) Which of the following are the methods of ex-situ conservation?

1. Biodiversity Hotspots
2. Community Reserves
3. Zoological Parks
4. Gene Sanctuary
5. Botanical Gardens
6. Sacred Groves
7. Seed banks

Select the correct code

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

Q.13) Solution (d)

In Situ Conservation Methods

In-situ conservation, the conservation of species in their natural habitats, is considered the most appropriate way of conserving biodiversity.

Conserving the areas where populations of species exist naturally is an underlying condition for the conservation of biodiversity. That's why protected areas form a central element of any national strategy to conserve biodiversity.

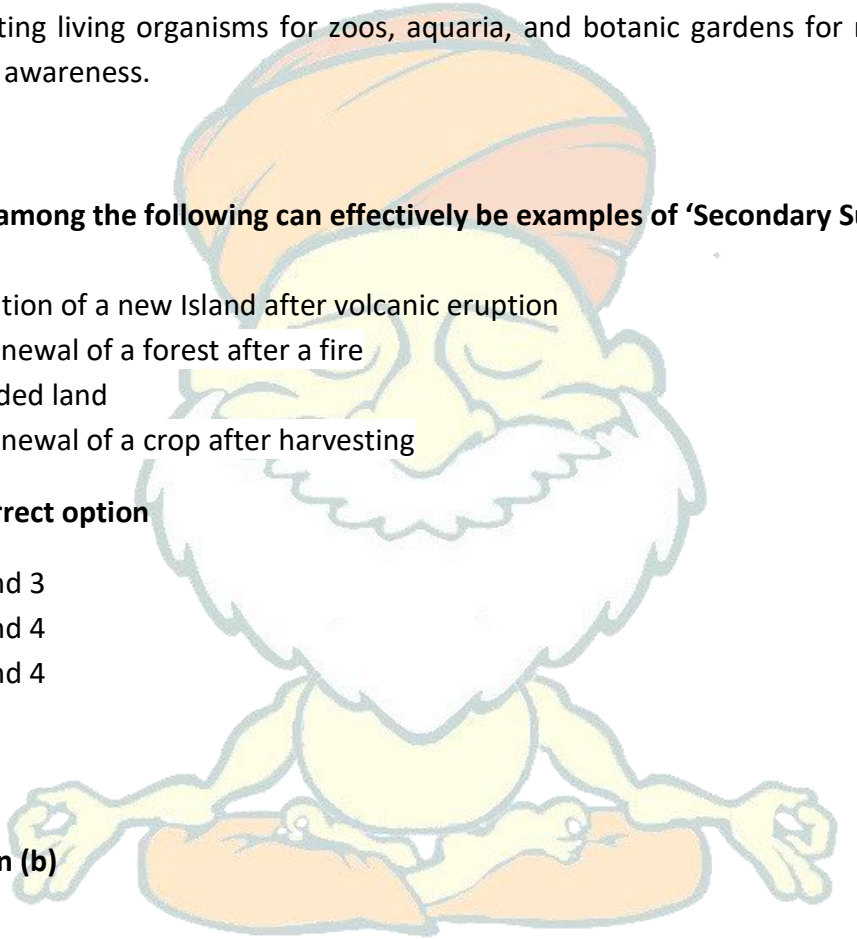
Methods

- Biosphere reserves
- National parks
- Wild sanctuaries
- Biodiversity Hotspots
- Gene sanctuary
- Community reserves
- Sacred groves

Ex Situ Conservation Methods

Ex-situ conservation is the preservation of components of biological diversity outside their natural habitats. This involves conservation of genetic resources, as well as wild and cultivated or species, and draws on a diverse body of techniques and facilities. Some of these include:

- Gene banks, e.g. seed banks, sperm and ova banks, field banks;
- In vitro plant tissue and microbial culture collections;
- Captive breeding of animals and artificial propagation of plants, with possible reintroduction into the wild; and
- Collecting living organisms for zoos, aquaria, and botanic gardens for research and public awareness.



Q.14) Which among the following can effectively be examples of 'Secondary Succession'?

1. Formation of a new Island after volcanic eruption
2. The renewal of a forest after a fire
3. A flooded land
4. The renewal of a crop after harvesting

Select the correct option

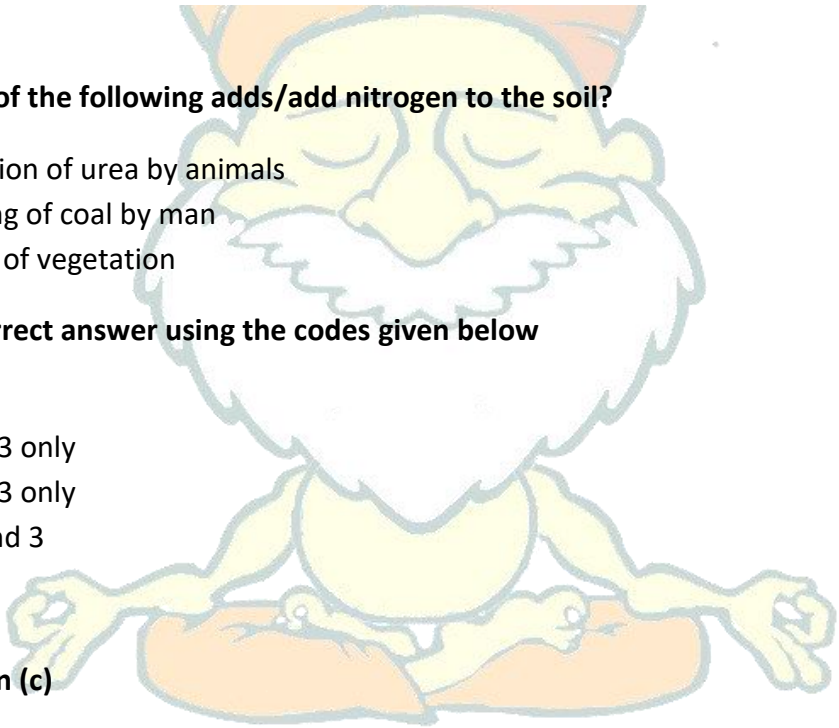
a) 1, 2 and 3
b) 2, 3 and 4
c) 1, 3 and 4
d) All

Q.14) Solution (b)

Examples of secondary succession include:

- **The renewal of a forest after a fire**: The fire itself destroys a majority of different types of trees and plant life. Because seeds and roots and other plant and tree parts remain in and on the soil, gradually the plants and trees begin to grow again and eventually return to the state of the original ecosystem.
- **The renewal of a crop after harvesting**: A crop is completed harvested when it becomes ripe. Without new seeds being planted, the crop can regenerate the following year due to the plants and seeds that remained after harvesting.

- **A forest renews after logging**: A large amount of trees were chopped down by loggers in order to create building materials. Over time, trees grow in and the area returns to its previous state.
- **Renewal after disease:** A plant population can be very negatively affected by a variety of infectious plant diseases. If the entire population dies, but the soil and roots remain, it is possible for secondary succession to occur and for the population of those plants to return.
- **A flood can ruin farmlands.** However, because the soil remains after the waters recede, over the course of many years a natural secondary succession can occur and the vegetation that had previously grown there can grow again.
- Plants can be very susceptible to attack from pests, particularly if there is an overpopulation of those pests. When this occurs, the plant population in one area can be completely destroyed. However, when the pest overpopulation is resolved, the plants are able to live again and thrive in the soil in which they previously had lived.



Q.15) Which of the following adds/add nitrogen to the soil?

1. Excretion of urea by animals
2. Burning of coal by man
3. Death of vegetation

Select the correct answer using the codes given below

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

Q.15) Solution (c)

Animal Waste like Urea, Uric acid and Death of vegetation add nitrogen in the form of nitrates directly into soil.

Coal combustion adds nitrogen to atmosphere not to soil directly and from there it falls back to earth in the form of acid rain and acid rain adds nitrogen to soil.

Q.16) Consider the following statements about Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

1. All the members of BIMSTEC are members of Indian-Ocean Rim Association (IORA)
2. Nepal and Bhutan have observer status in BIMSTEC

Select the correct statements

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

Q.16) Solution (d)

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organisation involving a group of countries in South Asia and South East Asia. These are: Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal.

The Indian Ocean Rim Association (IORA) is an international organization with 21 Member States - Australia, Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, UAE and Yemen.

Nepal was granted observer status by the second Ministerial Meeting in Dhaka in December 1998. Subsequently, full membership has been granted to Nepal and Bhutan in February 2004.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=151717

Q.17) Consider the following statements about African - Asian Rural Development Organization (AARDO)

1. India is one of the founding members of the AARDO
2. It is headquartered in New Delhi
3. It enjoys observer status with United Nations Conference on Trade and Development (UNCTAD) and United Nations Educational, Scientific and Cultural Organization (UNESCO)

Select the correct statements

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

d) All of the above

Q.17) Solution (d)

African-Asian Rural Development Organization (AARDO) formed in 1962, is an autonomous inter-governmental organization comprising 15 African members and 15 Asian members.

AARDO is devoted to develop understanding among members for better appreciation of each other's problems and to explore, collectively, opportunities for coordination of efforts for promoting welfare and eradication of thirst, hunger, illiteracy, disease and poverty amongst hundreds of millions of rural people. AARDO has its headquarters in New Delhi, India. India, one of the founding members of the AARDO, is the largest contributor in terms of membership contribution.

ARDO a non-political body enjoys observer status with various UN and other international organisations like Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP), International Cooperative Alliance (ICA), Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), etc. It also promotes collaboration with various international organisations for the economic and social welfare of the rural community.

Source: http://economictimes.indiatimes.com/news/economy/policy/cabinet-clears-india-aardo-mou-on-rural-development/articleshow/54693724.cms

Q.18) Which of the following countries left the Commonwealth of Nations recently?

a) Maldives
b) Gambia
c) Ireland
d) Zimbabwe

Q.18) Solution (a)

The Maldives quit Commonwealth over allegation of corruption and deteriorating human rights.

The country becomes the latest to leave the Commonwealth after Gambia which quit in October 2013.

The last two countries to join The Commonwealth are Rwanda and Mozambique.

Source: www.thehindu.com/news/international/Maldives-quits-Commonwealth-against-'unfair-treatment'-after-Nasheed-ouster/article16070214.ece

Q.19) Consider the following statements about Zero Defect – Zero Effect (ZED) scheme

1. The final ZED certification will be issued by Quality Council of India
2. The ZED Scheme will be implemented nationwide through Federation of Indian Chambers of Commerce & Industry (FICCI) and Confederation of Indian Industry (CII) only
3. The scheme is mandatory for all the MSMEs

Select the correct statements

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

Q.19) Solution (a)

ZED Scheme aims to rate and handhold all MSMEs to deliver top quality products using clean technology. It will have sector-specific parameters for each industry.

MSME sector is crucial for the economic progress of India and this scheme will help to match global quality control standards.

The slogan of Zero Defect, Zero Effect (ZED) was first mentioned by PM Narendra Modi in his Independence Day speech in 2014. It was given for producing high quality manufacturing products with a minimal negative impact on environment.

Statement 1 - The final certification will be issued by Quality Council of India after reviewing the site assessment report.

Statement 2 - The ZED Scheme will be implemented nationwide through Implementing Agencies such as QCI, NPC, Industry Chambers like CII, FICCI & ASSOCHAM, MSME-Development Institutes, MSME Technology Centres, Industry Associations, BEE, etc.

Statement 3 - No it is not mandatory, it is a voluntary scheme which will provide the MSMEs a roadmap to global competitiveness.

Quality Council of India, an autonomous body of Ministry of Commerce & Industry, has been nominated as the National Monitoring & Implementation Unit.

Quality Council of India is an autonomous body of Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, Govt. of India.

The main objectives of QCI are

- to establish and operate national accreditation structure
- to monitor and administer the National Quality Campaign

Read More - http://www.zed.org.in/faqs.php

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=151762

Q.20) Consider the following statements about Mining Surveillance System (MSS)

1. It is a satellite-based monitoring system
2. It has been developed by Indian Bureau of Mines (IBM) in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG) and Ministry of Electronics and Information Technology (MEITY)

Select the correct statements

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

Q.20) Solution (c)

Mining Surveillance System (MSS)

- MSS is a satellite-based monitoring system, which aims to check illegal mining activity through automatic remote-sensing detection technology.
- The Indian Bureau of Mines, on behalf of the mines ministry, has developed MSS, in co-ordination with the Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar, and the Ministry of Electronics and Information Technology (MEITY).
- Khasra maps of mining leases have been geo-referenced in MSS, which are superimposed on the latest satellite remote sensing scenes obtained from CARTOSAT and USGS.

- The system checks 500 meters around the existing mining lease boundary to search for any unusual activity relating to illegal mining. Any discrepancy is flagged off as a trigger.
- Automatic software leveraging image-processing technology will generate automatic triggers of unauthorised activities. These triggers will be studied at a remote-sensing control centre of IBM and then transmitted to district-level mining officials for field verification.

Mining Tenement System (MTS)

- MTS is an online computerised register that is intended to bring computerisation and automation in the functioning at directorates of mining and geology (DMGs) of 11 states, IBM, GSI and the mines ministry.
- The system will display applications under process, ownership and details of area granted, period of concession, taxes, compliance of rules and regulations, area available for grant of concession, quality and quantity of the ore deposit, portion relinquished after reconnaissance or prospecting operations, land details with ownership and the like.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=151684

Q.21) Agricultural Marketing & Farm Friendly Reforms Index is released by

a) World Economic Forum
b) NABARD
c) Food and Agriculture Organization (FAO)
d) None of the above

Q.21) Solution (d)

NITI Aayog launched the first ever Agricultural Marketing & Farm Friendly Reforms Index. Maharashtra ranks first.

It has a score which can have minimum value "0" implying no reforms and maximum value "100" implying complete reforms in the selected areas. States and UTs have been ranked in terms of the score of the index.

The state of Maharashtra achieved first rank in implementation of various reforms. The state has implemented most of the marketing reforms and it offers best environment for

doing agribusiness among all the states and UTs. Gujarat ranks second with a score of 71.5 out of 100, closely followed by Rajasthan and Madhya Pradesh. Almost two third states could not reach even halfway mark of reforms score. Major states like U.P., Punjab, West Bengal, Assam, Jharkhand, Tamil Nadu and J&K are in this group.

Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=153145