

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Consider the following statements about bio-pesticides and biocontrol agents.

1. *Myrothecium verrucaria* is used to control root-infecting fungus, *Sclerotium rolfsii* in groundnut.
2. *Aspergillus niger*, a ubiquitous bacteria, controls a number of soil borne pathogens.
3. *Metarrhizium anisopliae* is used to control termites and beetles on the farm.

Select the correct answer using the codes below.

- (A) 1 only
- (B) 2 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

ANSWER : C

Statement 2: *Aspergillus niger*, an ubiquitous fungus presents in all types of soil with no specific moisture and pH requirements.

It is formulated as wettable powder. It controls a number of devastating soil borne pathogens e.g. *Fusarium oxysporum*, *Macrophomina phaseolina*, *Pythium aphanidermatum*, *Rhizoctonia solani*, and *Sclerotinia sclerotiorum* belonging to different classes of fungi by a single application under different agro climatic conditions in different crops

Statement 1: It is a deuteromycete fungus, which produces cuticle degrading enzymes as well as mycolytic enzymes. It is formulated either in the form of conidia or unicellular yeast like cells. It is used to control root-infecting fungus, *Sclerotium rolfsii* on groundnut.

Statement 3: *Metarrhizium anisopliae* is a widely distributed soil-inhabiting fungus. The spore of *M. anisopliae* can be formulated as dust and sprayable formulation. It is used to control termites, mosquitoes, leaf hopper, beetles etc.

QUESTION) Which of the following is/are the key principles of “Zero Budget Natural Farming”?

1. Seed Treatment using local cowdung and cow urine
2. Mulching to ensure favorable microclimate in the soil
3. No use of chemicals fertilizers or chemical pesticides in the soil
4. Soil aeration

Select the correct answer using the codes below.

- (A) 2, 3 and 4 only
- (B) 1 and 3 only
- (C) 1, 2, 3 and 4
- (D) 2 and 4 only

Correct: C

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

The father of ZBNF and Padma Shri Awardee, Sh. Subash Palekar has provided four important non-negotiable guidelines: Bijamrita (Seed Treatment using local cowdung and cow urine), Jiwamrita (applying inoculation made of local cowdung and cow urine without any fertilizers and pesticides), Mulching (activities to ensure favorable microclimate in the soil), and Waaphasa (soil aeration).

Zero Budget Natural Farming, as the name implies, is a method of farming where the cost of growing and harvesting plants is zero. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops. It is, basically, a natural farming technique that uses biological pesticides instead of chemical-based fertilizers. Farmers use earthworms, cow dung, urine, plants, human excreta and such biological fertilizers for crop protection. It reduces farmers' investment. It also protects the soil from degradation.

QUESTION) The project titled as “Green Agriculture: Transforming Indian Agriculture for Global Environmental Benefit and Conservation of Critical Agricultural and Forest Biodiversity in Different Landscape” for implementation in identified five States in India including MP, UK, Mizoram, Odisha and Rajasthan has been initiated by the

(A) Government of India and FAO

(B) Global Environment Facility (GEF)

(C) Green Climate Fund (GCF)

(D) UNFCCC

ANSWER : A

Global Environment Facility (GEF) Council has approved the Government of India (MoAFW and MOEFCC) and Food and Agriculture Organization of the United Nations (FAO) Project Identified Form (PIF) with project titled as “Green Agriculture: Transforming Indian Agriculture for Global Environmental Benefit and Conservation of Critical Agricultural and Forest Biodiversity in Different Landscape” for implementation in identified five States viz:, Madhya Pradesh, Mizoram, Odisha, Rajasthan and Uttarakhand for implementation of various interventions over a period of seven years.

It will be implemented in these five states viz:, Madhya Pradesh, Mizoram, Odisha, Rajasthan and Uttarakhand for implementation of various interventions over a period of seven years. The project aims to address the challenges occurring due to unsustainable agricultural practices and catalyse transformative change for India’s agricultural sector to support achievement of national and global environmental benefits, and conserve critical agricultural biodiversity and forest landscapes. These objectives will be addressed through two components.

Component 1: “Policy Transformation” will address constraints in the enabling environment by putting in place the tools required to strengthen and enhance the capacity of the agricultural sector to

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

deliver biodiversity, sustainable land and forest management and climate change mitigation benefits. It will also help coordinate approaches including facilitating the adoption of appropriate fiscal and market incentives to promote or conserve diversity on-farm and across productive landscapes.

Component 2: ‘Management Transformation’ will demonstrate on-the-ground conservation improvements designed to drive higher-level changes. Under it, the project will work in high conservation priority landscapes to demonstrate replicable “best practices”. Interventions will be designed to show how ecosystem-based agricultural improvements can deliver social, production, and ecological benefits.

QUESTION) Which of the following is/are benefits of cooperative marketing in India?

1. The Cooperative marketing societies can easily arrange for bulk purchase of agricultural inputs like seeds and manure.
2. The marketing cooperative societies provide credit to the farmers to save them from the necessity of selling their produce immediately after harvesting.
3. The cooperatives can arrange to obtain data on market prices, demand and supply and other related information from the markets on a regular basis.

Select the correct answer using the codes below.

(A) 1 and 3 only

(B) 2 only

(C) 1 and 2 only

(D) 1, 2 and 3

ANSWER : D

The advantages that cooperative marketing can confer on the farmer are multifarious, some of which are listed below:

Increases bargaining strength of the farmers: If the farmers join hands and form a cooperative society, they will be able to increase their bargaining strength because their produce will now be marketed by single agency.

Direct dealings with final buyers: It outcast an intermediaries which eliminates the exploiters and ensures fair prices to both, the producers and the consumers.

Provision of credit: The marketing cooperative societies provide credit to the farmers to save them from the necessity of selling their produce immediately after harvesting. This ensures better returns to the farmers.

Easier and cheaper transport: This reduces the cost and botheration of transporting produce to the market.

Storage facilities: The cooperative marketing societies generally have storage facilities. Thus, the farmers can wait for better prices; also there is no danger to their crop from rains, rodents and thefts.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Grading and standardization: This task can be done more easily for a cooperative agency than for an individual farmer. For this purpose they can seek assistance from the government or can even evolve their own grading arrangements.

Market intelligence: The cooperatives can arrange to obtain data on market prices, demand and supply and other related information from the markets on a regular basis and can plan their activities accordingly.

Influencing market prices: While previously the market prices were determined by the intermediaries and merchants and the helpless farmers were mere spectators forced to accept whatever was offered to them, the cooperative societies have changed the entire complexion of the game.

Provision of inputs and consumer goods: The Cooperative marketing societies can easily arrange for bulk purchase of agricultural inputs like seeds, manures, fertilizers, pesticides, etc., and consumer goods at relatively lower prices and can then distribute them to the members.

Processing of agricultural produce: The Cooperative societies can undertake processing activities like crushing oil seeds, ginning and pressing of cotton, etc.

QUESTION) Which of these is/are among the listed objectives of the National Mission for Sustainable Agriculture (NMSA)?

1. To adopt comprehensive soil health management practices based on soil fertility maps
2. To optimize utilization of water resources through efficient water management to expand coverage for achieving “more crop per drop”
3. To develop inter-linkages of Peninsular and Himalayan rivers for efficient and equitable allocation of river water across India

Select the correct answer using the codes below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 3 only
- (D) 1, 2 and 3

Answer:a)

Other objectives are:

- ☑ To make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific Integrated/Composite Farming Systems;
- ☑ To conserve natural resources through appropriate soil and moisture conservation measures;
- ☑ To adopt comprehensive soil health management practices based on soil fertility maps, soil test based application of macro & micro nutrients, judicious use of fertilizers etc.;

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

☐ To optimize utilization of water resources through efficient water management to expand coverage for achieving ‘more crop per drop’;

☐ To pilot models in select blocks for improving productivity of rainfed farming by mainstreaming rainfed technologies

☐ To establish an effective inter and intra Departmental/Ministerial co-ordination

QUESTION) Consider the following about National Initiative on Climate Resilient Agriculture (NICRA).

1. It is a joint project of World Bank and FAO in India.
2. It aims to demonstrate site specific technologies on farmers’ fields for adapting to current climate risks.
3. It works towards the capacity building of scientists in climate resilient agricultural research and its application.

Select the correct answer using the codes below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 3 only
- (D) 1, 2 and 3

Answer:b)

Statement 1: ICAR launched National Initiative on Climate Resilient Agriculture (NICRA) during 2010-11 for the XIth Plan. S, 1 is wrong.

Statement 2 and 3: It has following objectives:

- To enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through development and application of improved production and risk management technologies
- To demonstrate site specific technology packages on farmers’ fields for adapting to current climate risks
- To enhance the capacity building of scientists and other stakeholders in climate resilient agricultural research and its application.

It follows the following approach to attain the same:

- Strengthening the existing net-work research on adaptation and mitigation (food crops, horticulture, livestock and fishery) with more infrastructure and capacity building
- Setting up of high through put phenotyping platforms and temperature, CO₂, ozone gradient facilities at identified locations/ institutions including North East region.
- Strengthening research on climate sensitive crops like cotton, maize, sugarcane, onion, etc. which are critical for India’s farm GDP/exports but not covered in the XI Plan

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Consider the following statements.

1. The major objective of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is to achieve convergence of investments in irrigation at the field level and expand cultivable area under assured irrigation.
2. A Long Term Irrigation Fund (LTIF) has been established under the Ministry of Agriculture and Farmer's Welfare for funding of Central and State share for the identified ongoing projects under PMKSY.
3. One of the primary objectives of the National Water Development Agency (NWDA) is to prepare National Perspective Plans (NPP) for inter-linking rivers to reduce water shortage.

Select the correct answer using the codes below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer:c)

Statement 1: It also intends to improve on-farm water use efficiency to reduce wastage of water and enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).

The scheme will be implemented by Ministries of Agriculture, Water Resources and Rural Development.

PMKSY has been conceived amalgamating ongoing schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and the On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

Statement 2: To cater to the large fund requirement and ensure completion of the projects, the Union Finance Minister, during his Budget speech 2016-17, announced creation of dedicated Long Term Irrigation Fund (LTIF) in NABARD with an initial corpus of Rs. 20,000 crore for funding of Central and State share for the identified ongoing projects under PMKSY (AIBP and CAD).

Corpus would be raised by way of budgetary resources and market borrowings to fund fast tracking of implementation of incomplete major & medium irrigation projects.

Statement 3: The National Water Development Agency (NWDA), was set up in July 1982 as Autonomous Society under the societies registration act 1860, to carry out the water balance and other studies on a scientific and realistic basis for optimum utilization of water resources of the Peninsular river system for preparation of feasibility reports and thus to give concrete shape to Peninsular river development component of National perspective plan

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

prepared by Central Water Commission and the then Ministry of Irrigation (now MoWR, RD & GR).

QUESTION) Small Farmers Agribusiness Consortium (SFAC) is

1. An Autonomous Society promoted by Ministry of Agriculture, Cooperation and Farmers' Welfare, Government of India
2. Organising small and marginal farmers as Farmers Producers Organisation and Farmers Producers Company for endowing them with bargaining power and economies of scale

Which of the above is/are correct?

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) None

Answer:c)

Small Farmers Agribusiness Consortium (SFAC) is an Autonomous Society promoted by Ministry of Agriculture, Cooperation and Farmers' Welfare, Government of India.

It was registered under Societies Registration Act XXI of 1860 in 1994.

The Society is governed by Board of Management which is chaired, ex-officio, by Hon'ble Union Minister for Agriculture and Farmers Welfare as the President and the Secretary, Department of

Agriculture, Cooperation and Farmers Welfare, Government of India, is the ex-officio Vice-President.

SFAC is implementing the central schemes of Government of India namely VCA, EGCGS for economic inclusion of small and marginal farmers in agribusiness activities. Society is pioneer in organising small and marginal farmers as Farmers Interest Groups, Farmers Producers Organisation and Farmers Producers Company for endowing them with bargaining power and economies of scale. It provides a platform for increased accessibility and cheaper availability of agricultural inputs to small and marginal farmers and in establishing forward and backward linkages in supply chain management. This initiative has triggered mobilization of farmers for aggregation across the country with ultimate aim of sustainable business model and augmented incomes.

Recently the Society has been entrusted with the task of implementation of the critically important Delhi KisanMandi and National Agriculture Market Scheme on e-platform to progressively free agricultural trade and offer price discovery to farmers.

QUESTION) Which of the following seems a logical reason as to why most of the private investment in Indian agriculture is on labour-saving mechanization?

- (A) Government is subsidizing and supporting private players in this endeavour.



EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(B) Feminization of agriculture has picked up pace.

(C) Wages in the rural agricultural market have risen significantly in last decade.

(D) All of the above

Answer:c)

There are many reasons as to why the rural wages have grown in past decade or so.

☐ The movement of labour away from agriculture has gathered momentum in recent decades.

☐ Schemes like MGNREGA are pumping in additional money and purchasing power in rural India.

☐ In the last decade, India has seen rapid growth of its economy and agricultural productivity, and a rise in the share of the non-agricultural sector in income and employment.

☐ Food constitutes a large share of the rural consumption basket, so high food inflation may raise the socially accepted minimum nominal wage.

All of these contributed to wage hikes and growing capitalist interested in cutting down labour cost by mechanization.

QUESTION) Consider the following with regard to the ownership and jurisdiction of marine resources. Which of the following statements is correct?

(A) Major minerals and land under the ocean waters within the territorial waters of India are owned by State government whereas those beyond territorial waters by Central government

(B) All major minerals and land under the ocean waters whether within or outside the territorial waters of India, until the end of Exclusive Economic Zone, are owned solely by the Central Government

(C) All major minerals under the ocean waters in the Exclusive Economic Zone are owned solely by the state Government

(D) None of the above is correct.

Answer: b)

Lands, minerals and other things of value under the waters of the ocean within the territorial waters of India, the continental shelf of India and the exclusive economic zone of India vests in the Union.

Hence, a state near the ocean cannot claim jurisdiction over these things. India's territorial waters extend to a distance of 12 nautical miles from the appropriate base line. Similarly, India's exclusive economic zone extends upto 200 nautical miles.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Which of the following decides the Issue Price of Food Grains in India?

- (A) Cabinet Committee on Economic Affairs (CCEA)
- (B) Food Corporation of India (FCI)
- (C) Commission on Agricultural Costs and Prices (CACP)
- (D) Ministry of Food, Public Distribution and Consumer Affairs

Answer:a)

A buffer stock is created by the government to distribute food grains in the deficit areas and among the poorer strata of society at a price lower than the market price also known as Issue Price.

FCI procures the food grains. It does not decide the issue price. So, B is wrong. CACP only recommends prices to the CCEA. It is the CCEA which finally decides the issue price. CACP is not authorized to fix them. So, C is wrong.

FCI plays a pivotal role in grain distribution and ensuring food security in India.

☐ The FCI purchases wheat and rice from the farmers in states where there is surplus production.

☐ The farmers are paid a pre-announced price for their crops. This price is called Minimum Support Price.

☐ The MSP is declared by the government every year before the sowing season to provide incentives to the farmers for raising the production of these crops.

QUESTION) With reference to Agmark, consider the following statements.

1. It is legally enforced in India by the Agricultural Produce (Grading and Marking) Act (amended 1986).
2. It is not applicable to processed or semi processed food.
3. The Agmark certification is employed through private laboratories contracted under the PPP model.

Select the correct answer using the codes below.

- (A) 1 only
- (B) 2 and 3 only
- (C) 1 and 2 only
- (D) 1, 2 and 3

Answer:a)

S1 and 2: Agmark is certification mark that assures conformity to set of standards approved by Government agency Directorate of Marketing and Inspection.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

It is legally enforced by Agricultural Produce (Grading and Marking) Act of 1937 (and ammended in 1986).

The present AGMARK standards cover quality guidelines for 205 different commodities spanning variety of cereals, pulses, vegetable oils, essential oils, fruits & vegetables, and semi-processed products like vermicelli.

The AGMARK is legally enforced in India by the Agricultural Produce (Grading and Marking) Act of 1937 (and ammended in 1986). The present AGMARK standards cover quality guidelines for 205 different commodities spanning a variety of Pulses, Cereals, Essential Oils, Vegetable Oils, Fruits & Vegetables, and semi-processed products like Vermicelli.

Statement 3: The Agmark certification is employed through fully state-owned Agmark laboratories located across the nation which act as testing and certifying centres.

QUESTION) While recommending price policy of various commodities under its mandate, the Commission for Agricultural Costs and Prices (CACP) keeps in mind

1. Agricultural price trends in the market, both domestic and international
2. Inter-crop price parity
3. Likely implications of Minimum Support Price (MSP) on consumers of that product

Select the correct answer using the codes below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1, 2 and 3
- (D) 1 only

Answer:c)

As per the various Terms of Reference (ToR) given to CACP in 2009, accordingly, it analyzes :

- 1) demand and supply;
- 2) cost of production;
- 3) price trends in the market, both domestic and international;
- 4) inter-crop price parity;
- 5) terms of trade between agriculture and non-agriculture (this is the ratio of agricultural vs industrial prices – higher is the price of agricultural products, more profits goes into the farmer’s pockets and people are more inclined to produce crops)
- 6) likely implications of MSP on consumers of that product.

It may be noted that cost of production is an important factor that goes as an input in determination of MSP, but it is certainly not the only factor that determines MSP.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Which of the following authority has the mandate of bulk procurement in Minor Forest Produce (MFP) and surplus Agricultural Produce (SAP) from Tribals in India?

- (A) Tribal Cooperative Marketing Development Federation of India Limited (TRIFED)
- (B) Food Corporation of India (FCI)
- (C) State-level Tribal Cooperatives Societies and Federations
- (D) None of the above

Answer:c)

Under its revised mandate TRIFED has stopped bulk procurement in Minor Forest Produce (MFP) and surplus Agricultural Produce (SAP) from Tribals. This procurement is now done by the State-level Tribal Cooperatives Societies/Federations.

TRIFED now functions as a 'market developer' for tribal products and as 'service provider' to its member federations.

TRIFED is now engaged in the marketing development of tribal products (natural and organic products, handicrafts, ratification etc.) through its own shops (TRIBES India) and shops selling its products on consignment basis.

QUESTION) The Government is formulating a Scheme "Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM)". The scheme essentially aims at promoting

- (A) Net-zero farms
- (B) Decentralized solar power production on farms
- (C) Use of wind mills to reduce erosion and generate power on farms
- (D) Non-fossil fuel based groundwater pumps

Answer:b)

It would provide extra income to farmers, by giving them an option to sell additional power to the grid through solar power projects set up on their barren lands. It would help in de-dieselising the sector as also the DISCOMS.

Components of the scheme: The components of the scheme include building 10,000 MW solar plants on barren lands and providing sops to DISCOMS to purchase the electricity produced, 'solarising' existing pumps of 7250 MW as well as government tube wells with a capacity of 8250 MW and distributing 17.5 lakh solar pumps.

The 60% subsidy on the solar pumps provided to farmers will be shared between the Centre and the States while 30% would be provided through bank loans. The balance cost has to be borne by the farmers.

Significance of the scheme: Expected positive outcomes of the scheme include promotion of decentralised solar power production, reduction of transmission losses as well as providing support to the financial health of DISCOMs by reducing the

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

subsidy burden to the agriculture sector. The scheme would also promote energy efficiency and water conservation and provide water security to farmers.

The proposed scheme provides for:

- ☐ Setting up of grid-connected renewable power plants each of 500KW to 2 MW in the rural area.
- ☐ Installation of standalone off-grid solar water pumps to fulfil irrigation needs of farmers not connected to grid.
- ☐ Solarization of existing grid-connected agriculture pumps to make farmers independent of grid supply and also sell surplus solar power generated to Discom and get extra income.

QUESTION) A sizeable portion of the undivided country's highly irrigated and fertile land went to Pakistan; this had an adverse impact upon India's output from the agriculture sector. One of most adversely affected crops/sectors was

- (A) Sugar
- (B) Rice
- (C) Millets
- (D) Jute

Answer:d)

This division particularly affected India's jute industry since almost the whole of the jute producing area became part of East Pakistan (now Bangladesh). India's jute goods industry (in which the country had enjoyed a world monopoly so far), thus, suffered heavily for lack of raw material.

Jute Textile Industry presently is one of the major Industries in the Eastern India, particularly in West Bengal. Jute supports around 40 Lakh farm families and provides direct employment to 2.6 Lakh Industrial Workers and 1.4 Lakh in the tertiary sector.

QUESTION) Which of these is/are the advantages of the Zero-tillage system?

1. No nitrogen needs to be applied to the soil.
2. Mineralization of the soil increases significantly improving soil productivity.
3. Surface runoff is reduced due to presence of mulch.

Select the correct answer using the codes below.

- (A) 1 and 2 only
- (B) 2 only
- (C) 3 only
- (D) 1, 2 and 3 only

Answer:c)

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

No-till farming (also called zero tillage or direct drilling) is a way of growing crops or pasture from year to year without disturbing the soil through tillage. No-tillage (also zero tillage) is a minimum tillage practice in which the crop is sown directly into soil not tilled since the harvest of the previous crop.

Advantages are:

☒ Zero tilled soils are homogenous in structure with more number of earthworms.

☒ Organic matter content increases due to less mineralization (decomposition or oxidation of the chemical compounds in organic matter into plant-accessible forms). So, 2 is wrong.

☒ Surface runoff is reduced due to presence of mulch.

Disadvantages are:

☒ Higher amount of nitrogen has to be applied for mineralization of organic-matter in zero tillage. So, 1 is wrong.

☒ Perennial weeds may be a problem

☒ High number of volunteer plants and build-up of pests.

QUESTION) High value horticulture such as grape cultivation is quite advantageous in the Mediterranean region because

1. Fruits and vegetables are grown in winters when there is great demand in European and North American markets.

2. The rainfall is high enough in these regions so that crops are grown without the requirement of irrigation.

Which of the above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

(D) None

Answer:a)

Statement 2: In general, grapevines thrive in temperate climates which grant the vines long, warm periods during the crucial flowering, fruit set and ripening periods. This is available in the Mediterranean climates. But, rainfall isn't enough. On average, a grapevine needs around 70 cm of rainfall for sustenance during the growing season, not all of which may be provided by natural rain fall. In Mediterranean and many continental climates, the climate during the growing season may be quite dry and require additional irrigation. So, 2 is incorrect.

Statement 1: More valuable crops such as fruits and vegetables are grown in winters which help satisfy the high demands in the western markets; hence the advantageousness of mediterranean agriculture.

QUESTION) Consider the following statements.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Assertion (A): In some parts of Southern India, Kharif crops can be grown during any period in the year.

Reason (R): Southern India receives continuous but light rainfall throughout the year.

In the context of the above, which of these is correct?

- (A) A is correct, and R is an appropriate explanation of A.
- (B) A is correct, but R is not an appropriate explanation of A.
- (C) A is correct, but R is incorrect.
- (D) Both A and R are incorrect.

Answer:c)

The distinction between Kharif, Rabi and Zaid seasons is not as marked in South India as it is in Northern India, and tropical crops can be grown during any period in the year in Southern India.

This is because the temperature in South India is generally high enough to grow these crops during any part of the year.

So, some crops can be grown thrice in an agricultural year provided there is sufficient soil moisture. So, A is correct.

Regular and light rainfall may be seen in some parts of Northern India where Western disturbances appear in the winter season in India and withdraw when Monsoon comes.

QUESTION) Consider the following about Agrinnovate India Limited (AgIn).

1. It is a “not for profit” company owned by Department of Agricultural Research & Education (DARE).
2. It aims to promote Research and Development (R&D) outcomes in agriculture through IPR protection in India and abroad.

Which of the above is/are correct?

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) None

Answer:b)

Statement 1: It was incorporated under the Companies Act, 1956 in 2011. It is a “for profit” Company owned by Department of Agricultural Research & Education (DARE), Ministry of Agriculture.

Statement 2: It aims to work on the strengths of Indian Council of Agricultural Research (ICAR) and promote the development and spread of R&D outcomes through IPR protection, commercialization and forging partnerships both in the country and outside for the public benefit.

The Company has been set up with an authorized share capital of Rs. 100 crore. The initial paid up capital would be met by

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

DARE/ICAR from its budgetary allocations, without recourse to any additional funds from the Government.

QUESTION) Consider the following statements.

Assertion (A): India grows only short staple (Indian) cotton, whereas long staple (American) cotton is grown in Pakistan and Afghanistan.

Reason (R): India lost a large proportion of cotton growing area to Pakistan during partition.

In the context of the above, which of these is correct?

- (A) A is correct, and R is an appropriate explanation of A.
- (B) A is correct, but R is not an appropriate explanation of A.
- (C) A is correct, but R is incorrect.
- (D) A is incorrect, but R is correct.

Answer:d)

India lost a large proportion of cotton growing area to Pakistan during partition.

However, its acreage has increased considerably during the last 50 years.

India grows both short staple (Indian) cotton as well as long staple (American) cotton called 'narma' in north-western parts of the country.

As staple length increases, so does cotton's soft, silky feel. For this reason, long staple cotton is a popular choice to make sheets, towels, and other quality products.

QUESTION) The Union Cabinet chaired approved providing Central Assistance for implementation of relining of Sirhind Feeder Canal over five years (2018-19 to 2022-23).

This relining would address the problem of water-logging in which of these regions?

- (A) South-West Punjab
- (B) Northern Uttar Pradesh
- (C) Southern Uttarakhand
- (D) NCT Delhi

Answer:a)

Canal irrigation systems in Punjab comprise of Sirhind Canal system, Bist Doab Canal system, Bhakra Main Line (BML) Canal System, Upper Bari Doab Canal system, Kashmir Canal , Ferozepur Feeder/Sirhind Feeder system, Eastern Canal system, Makhu Canal System, Shahnehar Canal system and the Kandi Canal system. The Rajasthan Feeder and Bikaner Canal which carry Ravi-

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Beas & Sutlej water exclusively for Rajasthan also run in a considerable length over Punjab Territory.

Implementation of these twin projects (Rajasthan canal and Sirhind canal lining) would help in addressing the problem of water-logging in 84800 Ha of land in Muktsar, Faridkot and Ferozpur districts in South-West Punjab and enhance the flows/water availability in the two canals. Farmers in the area would be benefitted due to stabilisation / improved irrigation in 98,739 Ha of land due to relining of Rajasthan Feeder and 69,086 Ha due to relining of Sirhind Feeder.

QUESTION) Consider the following statements regarding Minimum Support Price (MSP):

- (1) MSPs serve as a floor price that is fixed by the government as a long-term guarantee for investment decisions of producers.
- (2) There is a significant regional discrimination in the procurement of food grains at MSP in India.
- (3) MSPs are responsible for distorted cropping pattern in India.

Which of the statements given above are correct?

- (A) 1 and 2 only
- (B) 1 and 3 only
- (C) 2 and 3 only

(D) 1, 2 and 3

Answer: (d)

Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm produce prices. Statement 1 is correct.

The minimum support prices are announced by the Government of India at the beginning of the sowing season for certain crops on the basis of the recommendations of the Commission for

Agricultural Costs and Prices (CACP). Thus, MSPs served as a floor price that was fixed by the government as a long-term guarantee for investment decisions of producers. Statement 2 is correct.

The government procurement at MSP is highly skewed in favour of some northern States whereas highly discriminated against eastern States where it is minimal or non-existent. Statement 3 is correct.

MSP has put excessive focus on some crops such as wheat, paddy and sugarcane at the expense of pulses, oilseeds, etc. Therefore, cropping patterns in several parts of the country are distorted.

CACP considers several factors while recommending the MSP for a commodity such as cost of production, changes in input prices, international price situation, inter-crop price parity, etc. Government announces minimum support prices (MSPs) for 24 mandated crops and Fair and Remunerative Price (FRP) for sugarcane.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Regarding the “Network for Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC)” which was in the news recently, consider the following statements:

(1) NEDAC was set up in 1991 by the United Nations’ Food and Agriculture Organisation (FAO), the International Cooperative Alliance (ICA) and the International Labour Organisation (ILO).

(2) The NEDAC is a regional forum linking cooperative organisations of all the Asia- Pacific countries in promoting agricultural and rural development to ensure food and livelihood security.

(3) Union Agriculture Ministry and the National Cooperative Development Corporation (NCDC) are the members of NEDAC.

Which of the statements given above is/are correct?

- (A) 1 only
- (B) 1 and 2 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: (c)

Statement 1 is correct.

Network for Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC) was set up in 1991 by the United Nations’ Food

and Agriculture Organisation (FAO), the International Cooperative Alliance (ICA) and the International Labour Organisation (ILO).

Statement 2 is incorrect.

The NEDAC sensitises governments in the region on the role of agricultural cooperatives in promoting agricultural and rural development to ensure food and livelihood security for millions of people in Asia Pacific region. Its secretariat is at FAO Annex, Bangkok.

Statement 3 is correct.

Initially, NEDAC had 16 co-operative organisations from nine Asian countries as members. From India, Union Agriculture Ministry and NCDC were the initial members. At present, NEDAC has 24-member organisations.

QUESTION) What are the proposed benefits of the e- National Agriculture Market?

1. Promoting real-time price discovery based on actual demand and supply.
2. Removing information asymmetry between buyers and sellers.
3. Assuring the quality of products to the consumer.

Select the correct answer using the code given below.

- (A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(B) 1 and 2 only

(C) 2 and 3 only

(D) 1, 2 and 3

Answer: D

National Agriculture Market (eNAM)

- It is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
- Small Farmers Agribusiness Consortium (SFAC) is the lead agency for implementing eNAM under the aegis of the Ministry of Agriculture and Farmers' Welfare, Government of India.
- The NAM (National Agriculture Market) through an Agri-Tech Infrastructure Fund (ATIF) has been established by the Government of India in July 2015. NAM will provide a common e-market platform of regulated wholesale markets in states/UTs (those states /UTs that are desirous to join the platform).
- Objectives:
 - to integrate markets first at the level of the States and eventually across the country through a common online market platform, to facilitate pan - India trade in agricultural commodities

- to streamline marketing/transaction procedures and make them uniform across all markets to promote the efficient functioning of the markets;
- to promote better marketing opportunities for farmers/sellers through online access to more buyers / markets, removal of information asymmetry between farmer and trader, better and real-time price discovery based on actual demand and supply of Agri commodities, transparency in auction process, prices commensurate with quality of produce, online payment etc. that contribute to marketing efficiency;
- to establish quality assaying systems for quality assurance to promote informed bidding by buyers (Hence statement 3 is correct); and
- to promote stable prices and availability of quality produce to consumers.

QUESTION) Consider the following statements regarding the Protection of Plant Varieties and Farmers' Rights Authority:

1. It is a statutory body established under the Environment Protection Act, 1986.
2. The body is responsible for the maintenance of the National Register of Plant Varieties and the National Gene Bank.

Which of the statements given above is/are correct?

(A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: B

• To implement the provisions of the Protection of Plant Varieties and Farmers' Rights Act, 2001, the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare established the Protection of Plant Varieties and Farmers' Rights Authority in 2005. Hence statement 1 is not correct.

• The Chairperson is the Chief Executive of the Authority. Besides the Chairperson, the Authority has 15 members, as notified by the Government of India (GOI). Eight of them are ex-officio members representing various Departments/ Ministries, three from SAUs and the State Governments, one representative each for farmers, tribal organization, seed industry and women organization associated with agricultural activities are nominated by the Central Government. The Registrar General is the ex-officio Member Secretary of the Authority.

• General Functions of the Authority:

• Registration of new plant varieties, essentially derived varieties (EDV), extant varieties

o Developing DUS (Distinctiveness, Uniformity and Stability) test guidelines for new plant species;

o Developing characterization and documentation of varieties registered;

o Compulsory cataloging facilities for all variety of plants;

o Documentation, indexing and cataloging of farmers' varieties;

o Recognizing and rewarding farmers, community of farmers, particularly tribal and rural community engaged in conservation and improvement;

o Preservation of plant genetic resources of economic plants and their wild relatives;

o Maintenance of the National Register of Plant Varieties and

o Maintenance of National Gene Bank. Hence statement 2 is correct.

QUESTION) Consider the following statements about rain-fed agriculture in India:

1. A region is classified as rainfed if it has less than 10% net irrigated area.

2. More than 75% of pulses production in India is dependent on rainfed areas.

Which of the statements given above is/are correct?

(A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: B

- About Rainfed Agriculture

- o A region is classified as rainfed if it has less than 40% net irrigated area. Hence statement 1 is not correct.

- o A region is classified as rainfed if assured irrigation is not provided to the majority of the net sown area. It is an interrelation of production systems, natural resources, and people's livelihoods in rainfed regions.

- o In India, they cover around 180 districts and exist in all agro-climatic regions but are mostly concentrated in the arid and semi-arid area. About 61 percent of India's farmers rely on rain-fed agriculture and 55 percent of the gross cropped area is under rain-fed farming.

- Importance of these areas

- o Rain-fed areas contributed significantly to the country's food production.

- o They account for 88 percent of pulses and 40 percent of rice production in the country. Hence statement 2 is correct.

- o They also support 64 percent of cattle population in the country.

QUESTION) It is a broad-leaved evergreen plant native to India and Myanmar. Because of its high antibiotic and antibacterial properties, it is used in both Ayurveda and Unani system of medicine. It is a storehouse of useful chemicals, the most important being Azadirachtin, which is a well known natural insecticide. It is also known as the village pharmacy.

Which of the following tree/plant is being described in the above passage?

- (A) Sarpagandha
- (B) Neem
- (C) Turmeric
- (D) Tulsi

Answer: B

- India is known for its herbs and spices from ancient times. Some 2,000 plants have been described in Ayurveda and at least 500 are in regular use.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- **Neem (Azadirachta indica)** is a broad-leaved evergreen tree. Native to India and Myanmar, the neem is a member of the family Meliaceae, the mahoganies. It has high antibiotic and antibacterial properties. Because its products relieve so many different pains, fevers, and infections and get rid of household pests, it is known as village pharmacy. The earliest Sanskrit medicinal writings refer to the benefits of the fruits, seeds, oil, leaves, root, and bark of the neem. Each of these has long been used in both Ayurveda and Unani system of medicine.
- **Neem is a storehouse of useful chemicals**, the most important being Azadirachtin A, which is a well known natural insecticide. It belongs to a class of chemicals known as tetranor-triterpenoids or limonoids. Over 150 limonoids have been isolated and characterised from different parts of neem tree so far, but the process of their production had so far remained unknown.

Recently, a group of scientists from National Chemical Laboratory (NCL), Pune, Academy of Scientific and Innovative Research, and CSIR-Institute of Genomics and Integrative Biology, Delhi, have found that Mevalonate pathway contributes to biosynthesis of limonoids in neem.

- Hence option (B) is the correct answer.
- **Sarpagandha:** Sarpagandha is a famous tranquilizer and antipsychotic herb of India for the treatment of paranoia and schizophrenia, as well as a substance that controls hypertension. Sarpagandha is an erect, evergreen shrub, merely 15 to 45 cm high.
- **Tulsi:** Commonly known as holy basil, it is an aromatic perennial plant. It is native to the Indian subcontinent and widespread as a cultivated plant throughout the Southeast Asian tropics.
- Tulsi is cultivated for religious and traditional medicine purposes, and for its essential oil. It is widely used as a herbal tea, commonly used in

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Ayurveda, and has a place within the Vaishnava tradition of Hinduism, in which devotees perform worship involving holy basil plants or leaves.

- **Turmeric:** Turmeric is a perennial green plant that can grow up to 2 feet long and produce yellow flowers. Its root (rhizomes) grow and multiply underground and are used as a spice. It is native to Southern Asia.
- **Other commonly used plants in India are:**
- **Jamun:** The juice from ripe fruit is used to prepare vinegar, which is carminative and diuretic, and has digestive properties. The powder of the seed is used for controlling diabetes.
- **Arjun:** The fresh juice of leaves is a cure for earache. It is also used to regulate blood pressure.
- **Babool:** Leaves are used as a cure for eyesores. Its gum is used as a tonic.
- **Kachnar:** Is used to cure asthma and ulcers. The buds and roots are good for digestive problems.

QUESTION) There are different names for shifting cultivation in different regions. In this context, which of the following pairs are correctly matched?

Shifting Cultivation : Region

1. Chena : Indonesia
2. Ladang : Malaysia
3. Podu : India
4. Milpa : Mexico

Select the correct answer using the code given below.

- (A) 1, 2 and 3 only
(B) 2, 3 and 4 only
(C) 1 and 4 only
(D) 1, 2, 3 and 4

Answer: B

o Shifting cultivation is believed to be the most primitive form of agriculture and is also called slash

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

and burn agriculture. In this cultivation the cultivated patches are very small and cultivation is done with very primitive tools such as sticks and hoes. It is known by various names in different regions:

- Ladang in Malaysia and Indonesia (also called as Humah)
- Milpa in central America, Mexico and Africa
- Caingin in the Phillipines
- Tamrai in Thailand
- Chena in Sri Lanka
- o In India it is known as:
 - Jhoom in Assam
 - Onam in Kerala
 - Podu in Orissa and Andhra Pradesh
 - Bewar, Masha, Penda and Bera in Various parts of Madhya Pradesh.

QUESTION) With reference to the National Mission for Sustainable Agriculture (NMSA), consider the following statements:

1. It is one of the missions under the National Action Plan on Climate Change (NAPCC).
2. One of its objectives is to conserve natural resources through appropriate soil and moisture conservation measures.
3. Rainfed Area Development and On-Farm Water Management are the major components of the mission.

Which of the statements given above is/are correct?

- (A) 1 and 2 only
- (B) 2 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: D

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

□ **National Mission for Sustainable Agriculture (NMSA)** has been formulated for enhancing agricultural productivity especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation. It is one of the eight missions under the National Action Plan on Climate Change (NAPCC). Hence statement 1 is correct.

□ **Mission Objectives:**

- To make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific Integrated/Composite Farming Systems;
- To conserve natural resources through appropriate soil and moisture conservation measures. Hence statement 2 is correct.
- To adopt comprehensive soil health management practices based on soil fertility maps, soil test

based application of macro & micro nutrients, judicious use of fertilizers etc.;

- To optimize utilization of water resources through efficient water management to expand coverage for achieving ‘more crop per drop’
- To develop capacity of farmers & stakeholders, in conjunction with other on - going Missions e.g. National Mission on Agriculture Extension & Technology, National Food Security Mission, National Initiative for Climate Resilient Agriculture (NICRA) etc., in the domain of climate change adaptation and mitigation measures;
- To pilot models in select blocks for improving productivity of rainfed farming by mainstreaming rainfed technologies refined through NICRA and by leveraging resources from other schemes/Missions like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Integrated Watershed Management Programme (IWMP), RKVY etc.; and

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- To establish an effective inter and intra Departmental/Ministerial co - ordination for accomplishing key deliverables of National Mission for Sustainable Agriculture under the aegis of National Action Plan on Climate Change (NAPCC).

□ Statement 3 is correct: NMSA has following four major programme components:

Rainfed Area Development (RAD): RAD adopts an area based approach for development and conservation of natural resources along with farming systems. This component has been formulated in a 'watershed plus framework', i.e., to explore potential utilization of natural resources base/assets available/created through watershed development and soil conservation activities /interventions under MGNREGS, NWDPRA, RVP&FPR, RKVY, IWMP etc..

- **On Farm Water Management (OFWM):** OFWM focuses primarily on enhancing water use

efficiency by promoting efficient on - farm water management technologies and equipment. This not only focuses on application efficiency but, in conjunction with RAD component, also will emphasize on effective harvesting & management of rainwater.

- **Soil Health Management (SHM):** SHM aims at promoting location as well as crop specific sustainable soil health management including residue management, organic farming practices by way of creating and linking soil fertility maps with macro - micro nutrient management, appropriate land use based on land capability, judicious application of fertilizers and minimizing the soil erosion/degradation.
- **Climate Change and Sustainable Agriculture: Monitoring, Modeling and Networking (CCSAMMN):** CCSAMMN provides creation and bidirectional (land/farmers to research/scientific establishments and vice versa) dissemination of

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

climate change related information and knowledge by way of piloting climate change adaptation/mitigation research/model projects in the domain of climate smart sustainable management practices and integrated farming system suitable to local agro - climatic conditions.

QUESTION) Which of the following is/are the advantage(s) of adopting System of Rice Intensification (SRI) methodology in agriculture?

1. It increases the productivity of rice by 30-35% in conventional varieties.
2. Crops grown using SRI method have greater resilience towards drought and storms.
3. It reduces the need of seed and chemical fertilizers in crop production.

Select the correct answer using the code given below.

- (A) 1 and 2 only
(B) 1 only

(C) 2 and 3 only

(D) 1, 2 and 3

Answer: D

□ The System of Rice Intensification, known as SRI is an agro-ecological methodology for increasing the productivity of irrigated rice by changing the management of plants, soil, water, and nutrients. SRI originated in Madagascar in the 1980s.

□ SRI improves the productivity of rice by 30 to 35% in the conventional varieties and over 50% in hybrids, hence a potential source of a technological revolution for small and marginal farms.

□ It is a skill-intensive technology that cuts the need for inputs such as seeds and fertilizers while raising yields per ha. The area under SRI has increased progressively since 2000-01. The leading states that are practicing this are Tamil Nadu, Bihar, and Tripura. The government may consider expanding the scope of

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

the technology through extension programs as a part of its strategy to bring the Green Revolution to eastern India.

□ Use of chemical fertilizer can be reduced significantly by using this methodology as fertilizer use efficiency increases in soils enriched with organic matter. As soils improve in structure and become more fertile through periodic organic matter amendments, less fertilizer is needed to achieve a targeted production level. If the soil is sufficiently fertile, use of chemical fertilizer can be eliminated.

□ As the SRI plants are stronger and more deeply rooted, it shows greater resilience towards drought, strong winds, and storms. These hazards are becoming more frequent and more extreme with climate change. SRI management usually shortens the crop cycle by 1-2 weeks. This frees up land for other uses and reduces crops' exposure to climatic stresses and pest and disease risks.

□ Use of pesticides can be decreased because SRI plants are stronger and healthier. Disease pressure is reduced when plants are widely spaced because humidity levels in the plant canopy are lower than in more densely planted conventional fields.

QUESTION) With reference to micro-irrigation technologies, which of the following statements is/are correct?

1. Micro-irrigation technologies can be used for irrigating difficult terrains and water deficit regions.
2. Micro-irrigation has potential to control ground and surface water pollution.
3. The technology helps in reducing the usage of fertilizers.

Select the correct answer using the code given below.

(A) 1 and 2 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- (B) 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: D

□ Micro Irrigation which includes drip and sprinkler irrigation is a proven technology which has gained immense popularity amongst the farmers in India.

□ Strengths of this technology include - efficient deployment of inputs such as water, electricity, fertilizers, labour etc, increase in crop productivity, better quality of produce leading to higher realization of sale price resulting in increased income of farmer and prosperity.

□ With this technology, additional area can be irrigated with the same amount of water compared to conventional method of irrigation. In addition, water deficient, cultivable waste land and undulating land (difficult terrains) areas can easily be brought under

cultivation due to ease of irrigation. With this technology, there is also a good scope for using it in closely spaced crops like rice, wheat, onion, potato etc. Benefits of this technology lead to control of ground and surface water pollution.

□ Micro irrigation technology has a good scope for generation of employment opportunities in rural areas besides arresting migration of farmers to cities.

□ An impact evaluation study for Micro Irrigation was carried out in the year 2014 and major findings of the study are:

- o Irrigation cost reduced by 20% to 50% with the average of 32.3%.
- o Electricity consumption reduced by about 31%.
- o Saving of fertilizers vary from 7% to 42%.
- o Average productivity of fruits and vegetables increased by about 42.3% and 52.8%.



EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

o Overall income enhancement of farmers in the range of 20% to 68% with average of 48.5%

o The positive outcomes of micro irrigation have made food security effective due to increase in production and productivity of different crops and increased area under irrigation from the same source of water resulting in enhanced nutritional security for the country.

QUESTION) Which of the following statements about the Pradhan Mantri Fasal Bima Yojana (PMFBY) is/are not correct?

1. Its objective is to stabilize the income of farmers to ensure their continuance in farming.

2. Under the scheme only food crops damages are covered.

3. The scheme covers post-harvest losses due to hail storms and unseasonal rainfall.

Select the correct answer using the code given below.

(A) 2 only

(B) 1 and 2 only

(C) 1, 2 and 3

(D) 1 and 3 only

Answer: A

□ Pradhan Mantri Fasal Bima Yojana (PMFBY) aims at supporting sustainable production in agriculture sector by way of -

o providing financial support to farmers suffering crop loss/damage arising out of unforeseen events

o stabilizing the income of farmers to ensure their continuance in farming. Hence, statement 1 is correct.

o encouraging farmers to adopt innovative and modern agricultural practices

□ Government modifies operational guidelines for Pradhan Mantri Fasal Bima Yojana (PMFBY). The farmers will be paid 12% interest by insurance

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

companies for the delay in settlement claims beyond two months of prescribed cut-off date. State Governments will have to pay 12% interest for the delay in release of State share of subsidy beyond three months of prescribed cut-off date submission of requisition by insurance companies.

□ The Government has also decided to include perennial horticultural crops under the ambit of PMFBY on a pilot basis.

□ Apart from food crops (Cereals, Millets and Pulses), Oilseeds and Annual Commercial / Annual Horticultural crops are also included in the crop insurance. Hence statement 2 is not correct.

□ The scheme, as per the new operational guidelines provides add on coverage for crop loss due to attack of wild animals, which will be implemented on a pilot basis; along with post harvest losses arising due to hail storms, unseasonal and cyclonic rainfalls. Hence, statement 3 is correct.

QUESTION) With reference to the KRISHI (Knowledge-based Resources Information Systems Hub for Innovations) initiative, consider the following statements:

1. It is an initiative of the Indian Council of Agricultural Research.
2. Its aim is to develop a centralized data repository of technologies, geo-spatial data and other data related to agriculture.

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

Answer: C

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

□ Statement 1 is correct: KRISHI - Knowledge based Resources Information Systems Hub for Innovations in agriculture, is an initiative of Indian Council of Agricultural Research (ICAR) to bring its knowledge resources to all stakeholders at one place.

□ Statement 2 is correct: The portal is being developed as a centralized data repository system of ICAR consisting of Technology, Data generated through Experiments/ Surveys/ Observational studies, Geo-spatial data, Publications, Learning Resources etc. related to agriculture.

□ For implementation of research data management electronically in ICAR Institutes and digitization of agricultural research, KRISHI Portal has been developed as ICAR Research Data Repository for knowledge management. Data Inventory Repository aims at creating Meta Data Inventory through information related to data availability at Institute level. The portal consists of six repositories viz. technology,

publication, experimental data, observational data survey data and geo-portal.

QUESTION) With reference to the Targeted Public Distribution System (TDPS), consider the following statements:

1. It aims to distribute foodgrains at affordable prices to Below Poverty Line (BPL) families only.
2. The Central government has the sole responsibility for the implementation of TDPS.

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

Answer: D

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

□ The Public Distribution System (PDS) evolved as a system of management of scarcity and for distribution of food grains at affordable prices. In June, 1997, the Government of India launched the Targeted Public Distribution System (TPDS) with focus on the poor.

□ TPDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through Food Corporation of India (FCI), has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments. The operational responsibility including allocation within State, identification of eligible families, issue of Ration Cards and supervision of the functioning of Fair Price Shops (FPSs) etc., rest with the State Governments. Under the TPDS, presently the commodities namely wheat, rice, sugar and kerosene are being allocated to the States/UTs for distribution. Some States/UTs also distribute additional items of mass consumption through

the PDS outlets such as pulses, edible oils, iodized salt, spices, etc. Hence statement 2 is not correct.

□ It covers both Below Poverty Line (BPL) and Above Poverty Line (APL) families. Government of India increased the allocation to BPL families from 10 kg to 20 kg of food grains per family per month at 50% of the economic cost and allocation to APL families at economic cost w.e.f. 1.4.2000. The allocation of APL families was retained at the same level as at the time of introduction of TPDS but the Central Issue Prices (CIPs) for APL were fixed at 100% of economic cost from that date so that the entire consumer subsidy could be directed to the benefit of the BPL population. Hence statement 1 is not correct.

QUESTION) Consider the following statements regarding Dalbergia Sisso/Sheesham (North Indian Rosewood) tree:

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

1. It is a deciduous tree native to the Indian sub-continent.
2. It is used for making musical instruments due to its acoustic properties.
3. It has medicinal applications for treating skin and blood diseases.

Which of the statements given above are correct?

- (A) 1 and 2 only
(B) 2 and 3 only
(C) 1 and 3 only
(D) 1, 2 and 3

Answer: D

□ Statement 1 is correct: Dalbergia sissoo also called Sheesham or North Indian rosewood is a deciduous tree with an open spreading crown that reaches a height between 15-35 metres.

□ Dalbergia sissoo is native to the Indian Sub-continent, Myanmar and possibly also neighbouring countries.

□ It is found in tropical to subtropical climates in natural and planted forests, mainly along forest margins near streams and rivers, hammocks, canopy gaps, agricultural areas, disturbed sites and roadsides.

□ Statement 2 is correct: The wood is prized for its unique, blood-hued lusture, intricate grain, durability and fine finish. Due to its acoustic properties, it is also sought-after for making guitars.

□ Statement 3 is correct: The tree has many reputed medicinal properties and is used for a variety of ailments including skin diseases, blood diseases, syphilis, stomach problems, dysentery, nausea, eye and nose disorders, aphrodisiac, expectorant, among others. Indian rosewood also has insecticidal and larvicidal properties, as well as resistance to some

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

wood boring insects. Dalbergia sissoo is a species of least concern.

QUESTION) With reference to Gramin Agricultural Markets (GrAMs), consider the following statements:

1. GrAMs are to be regulated by the Agriculture Produce Market Committees (APMCs).

2. Like the APMCs system, the farmers are restricted from directly selling their produce to consumers and bulk purchasers.

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

Answer: D

□ More than 86% of our farmers are small and marginal. They are not always in a position to directly transact at APMCs and other wholesale markets.

□ These GrAMs, electronically linked to e-NAM and exempted from regulations of Agriculture Produce Market Committees (APMCs). Hence statement 1 is not correct.

□ The APMC system was introduced to prevent distress sale by farmers to their creditors, to protect farmers from the exploitation of intermediaries and traders and to ensure better prices and timely payment for their produce through the auctions in the APMC area. However, APMC Acts restrict the farmer from entering into direct contract with any processor/ manufacturer/ bulk processor as the produce is required to be routed through these regulated markets. But the GrAMs will provide farmers facility to make direct sale to consumers and bulk purchasers. Hence statement 1 is not correct.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Which of the following statements is/are correct regarding the Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) initiative?

1. It is an initiative by the Ministry of Agriculture and Farmers' Welfare.
2. It aims to understand the problems of soil and seed faced by the farmers and provide simple solutions to them.
3. It is being implemented in 15 agro- climatic zones of India in a phased manner.

Select the correct answer using the code given below.

- (A) 1 and 2 only
(B) 3 only
(C) 2 and 3 only
(D) 1, 2 and 3

Answer: C

□ Statement 1 is not correct: Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) is a Department of Biotechnology, Ministry of Science and Technology initiative that empowers farmers, especially women farmers. It aims to understand the problems of water, soil, seed and market faced by the farmers and provide simple solutions to them. Hence statement 2 is correct.

□ The Scheme is for farmers, developed by and with farmers, it empowers women, impacts locally, connects globally, is Pan-India, has a hub-and spoke model and stimulates entrepreneurship and innovation in farmers.

□ Statement 3 is correct: Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) is being implemented in 15 agro-climatic zones of India in phased manner with the following objectives:

o Linking available science and technology to the farm by first understanding the problem of the local farmer and provide solutions to those problems.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

o The working together, in close conjunction, of scientists and farmers is the only way to improve the working conditions of small and marginal farmers.

o This programme aims to work with small and marginal farmers especially the woman farmer for better agriculture productivity through scientific intervention and evolving best farming practices in the Indian context.

□ For women empowerment:

o Mahila Biotech- KISAN fellowships, for training and education in farm practices, for women farmers.

o The Scheme also aims to support the women farmers/ entrepreneur in their small enterprises, making her a grass root innovator.

QUESTION) With reference to the Integrated Scheme for Agricultural Marketing (ISAM), consider the following statements:

1. It is being implemented by the Ministry of Food Processing Industry.

2. One of its objectives is to integrate markets through a common online market platform to facilitate pan-India trade in agricultural commodities.

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

Answer: B

□ ISAM aims to develop agricultural marketing infrastructure; to promote innovative and latest technologies and competitive alternatives in agriculture marketing infrastructure; to provide infrastructure facilities for grading, standardization and quality certification of agricultural produce; to establish a

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

nationwide marketing information network; to integrate markets through a common online market platform to facilitate pan-India trade in agricultural commodities, etc. Hence statement 2 is correct.

□ The ISAM has six sub-schemes namely

1. Agricultural Marketing Infrastructure (AMI):

1. Storage Infrastructure

2. Marketing Infrastructure other than Storage

2. Marketing Research and Information Network (MRIN)

3. Strengthening of Agmark Grading Facilities (SAGF)

4. Training, Research and Consultancy through Choudhary Charan Singh National Institute of Agricultural Marketing (NIAM)

5. Agribusiness Development through Venture Capital Assistance (VCA) and Project Development Facility

6. National Agriculture Market (e-NAM): During 2017-18, National Agriculture Market Scheme popularly

known as e-NAM scheme has also been made part of it.

QUESTION) With respect to food fortification, consider the following statements:

1. It is the addition of vitamins and minerals to staple foods that are consumed in fairly sufficiently large amounts.

2. Food fortification increases the shelf life of food.

3. Department of Consumer Affairs is the nodal agency issuing guidelines regarding food fortification in India.

Which of the statements given above is/are correct?

(A) 1 only

(B) 1, 2 and 3

(C) 2 and 3 only

(D) 1 and 2 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Answer: A

□ Food fortification is the addition of vitamins and minerals to a staple foods or any other food that is consumed in fairly consistent and sufficiently large amounts. Generally, food fortification is undertaken at the industrial level, although food fortification can also take place at the household or community levels. Food fortification help to address micronutrient deficiencies. Hence, statement 1 is correct.

□ Food fortification does not change the appearance, texture, taste and flavour of food. Fortification has no impact on the shelf-life of a product. Hence, statement 2 is not correct.

□ The vitamins and minerals have a shelf life of their own although they do become less active over time. There is 10-15% loss of the micronutrients at boiling or frying temperature.

□ Food Safety and Standards Authority of India (FSSAI) is issuing guidelines regarding food fortification in India. Hence, statement 3 is not correct.

QUESTION) Food Corporation of India is responsible for:

1. Procuring grains at the MSP from farmers.
2. Allocating grains to states.
3. Maintaining operational and buffer stocks of grains to ensure food security.

Select the correct answer using the code given below.

- (A) 1 only
(B) 1, 2 and 3
(C) 3 only
(D) 2 and 3 only

Answer: B

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

□ The Food Corporation of India was setup under the Food Corporation Act 1964. The Food Corporation of India (FCI) is the nodal agency at the centre that is responsible for transporting food grains to the state godowns.

□ Specifically, FCI is responsible for:

- o procuring grains at the MSP from farmers,
- o maintaining operational and buffer stocks of grains to ensure food security,
- o allocating grains to states,
- o distributing and transporting grains to the state depots, and
- o selling the grains to states at the central issue price to be eventually passed on to the beneficiaries.
- o Distribution of foodgrains throughout the country for public distribution system.

QUESTION) With reference to economy, the term predatory pricing refers to:

(A) the pricing of goods or services at such a low level that other firms cannot compete and are forced to leave the market.

(B) the pricing of goods at high levels by a company exercising monopoly in the economy.

(C) the practice of subsidizing goods in the economy by the government reducing private sector participation.

(D) the pricing of goods and services at high levels during peak demand periods.

Answer: A

□ Predatory pricing is the act of setting prices low in an attempt to eliminate the competition. In common parlance, predatory pricing may be defined as pricing below an appropriate measure of cost for the purpose of eliminating competitors in the short run and reducing competition in the long run. It is a practice that harms

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

both competitors and competition. Normally price cutting is aimed simply at increasing market share, predatory pricing has as its aim the elimination of competition and creating monopoly.

QUESTION) KALIA scheme launched by the government of Odisha, sometimes seen in the news, is related to:

- (A) Incentivisation of adoption of solar power pumps for irrigation.
- (B) Providing financial assistance to cultivators and landless agricultural laborers.
- (C) Promotion of non-timber based economy, especially in tribal areas.
- (D) Promotion of agro-forestry as an alternative source of income for farmers.

Answer: B

□ Krushak Assistance for Livelihood and Income Augmentation or KALIA scheme was launched by the government of Odisha was launched in December 2018.

□ All farmers will be provided Rs 10,000 per family as assistance for cultivation. Each family will get Rs 5,000 separately in the kharif and rabi seasons, for five cropping seasons between 2018-19 and 2021-22.

□ The scheme targets 10 lakh landless households, and specifically SC and ST families. They will be supported with a unit cost of Rs 12,500 for activities like goat rearing, mushroom cultivation, beekeeping, poultry farming and fishery.

□ The interventions will assist the elderly, sick and differently-abled population who are unable to take up cultivation, by providing Rs 10,000 per household per year.

□ The KALIA scheme includes a life insurance cover of Rs 2 lakh and additional personal accident coverage

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

of the same amount for 57 lakh households. Crop loans up to Rs 50,000 are interest-free.

QUESTION) With reference to bulk drug, consider the following statements:

1. Paracetamol is not a bulk drug.
2. APIs are prepared from multiple reactions involving chemicals and solvents.

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

:Correct: B

Himachal Pradesh is one of the states vying for the allotment of a bulk drug park under a central government scheme announced earlier this year for setting up three such parks across the country.

A bulk drug, also called an active pharmaceutical ingredient (API), is the key ingredient of a drug or medicine, which lends it the desired therapeutic effect or produces the intended pharmacological activity. For example, paracetamol is a bulk drug, which acts against pain.

It is mixed with binding agents or solvents to prepare the finished pharmaceutical product, i.e. a paracetamol tablet, capsule or syrup, which is consumed by the patient.

APIs are prepared from multiple reactions involving chemicals and solvents. The primary chemical or the basic raw material which undergoes reactions to form an API is called the key starting material, or KSM.

Chemical compounds formed during the intermediate stages during these reactions are called drug intermediates or DIs.

Hence only statement 2 is correct.

QUESTION) With reference to the biomass gasification based hydrogen generation technology, consider the following statements:

1. The Bengaluru based Indian Institute of Science and Indian Oil Corporation (IOCL) have signed an MOU to develop biomass gasification based hydrogen generation technology for producing fuel cell-grade hydrogen at an affordable price.
2. The technology is crucial for the fuel cell operated buses being conceived by Indian Oil towards ushering in the country's hydrogen economy.

Which of the statements given above is/are correct?

- (A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

:Correct: C

The Bengaluru based Indian Institute of Science and Indian Oil Corporation (IOCL) have signed an MOU to develop biomass gasification based hydrogen generation technology for producing fuel cell-grade hydrogen at an affordable price.

Both IISc and Indian Oil will demonstrate the technology in the Indian Oil R&D Centre in Faridabad.

The technology is crucial for the fuel cell operated buses being conceived by Indian Oil towards ushering in the country's hydrogen economy.

Indian Oil Corporation had recently launched trials of 50 buses in Delhi using hydrogen-CNG as a fuel, based on Indian oil patented single step reforming technology. It is now working with IISc to use hydrogen production technology based on biomass gasification.

IISc has worked on biomass gasification and developed an innovative process for the production of hydrogen rich syngas and a small scale prototype is demonstrated in the IISc campus.

The use of this technology will not only provide a cleaner energy option for India but also be a step towards addressing the challenge of biomass waste.

Hence both statements are correct.

QUESTION) With reference to the “Minimum Requirements For Annual MBBS Admissions Regulations (2020)”, consider the following statements:

1. It replaces the “Minimum Standard Requirements for Medical Colleges, 1999” of the erstwhile Medical Council of India (MCI).
2. A well-equipped “Skills Laboratory” for training students is essential now.

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

ANSWER : A

In a significant step towards affordable medical education, the National Medical Commission (NMC) has notified its first major regulation.

Titled as “Minimum Requirements For Annual MBBS Admissions Regulations (2020)”, the notification replaces the “Minimum Standard Requirements for Medical Colleges, 1999” of the erstwhile Medical Council of India (MCI).

EKLAVYA 360° PRELIMS PROGRAM – TEST 11 Explanation

The new Regulation shall be applicable to all new medical colleges proposing to be established, and to the established medical colleges proposing to increase their annual MBBS intake from the academic year 2021-22.

The key changes:

The new Regulation has deleted the quantum of land required for setting up a medical college and its affiliated teaching hospitals.

A well-equipped “Skills Laboratory” for training students is essential now.

It also defines a Medical Education Unit for training medical teachers in educational pedagogy.

The space required for Library and the number of books and journals have been rationalized and reduced.

Student counselling services has been mandated recognizing the increasing stress observed amongst medical students and residents in recent times.

the new regulation now mandates the availability of a fully functional 300 bed multi-speciality hospital for at least 2 years at the time of application for establishing a new medical college (the earlier regulations did not specify the period of functionality).

Over and above the minimum prescribed faculty, provision for “visiting faculty” has been made to enhance quality of training.

Hence both statements are correct.

The target group is Doctors, Nurses, Central & State Govt. Officers, Civil Defence Officials, various Police Organisations, National Cadet Corps (NCC), Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme (NSS), Indian Red Cross Society (IRCS), Bharat Scouts & Guides (BSG) and other volunteers.

The platform delivers curated, role-specific content, to each learner at his place of work or home.

To begin with nine courses on iGOT have been launched on topics like Basics of COVID, ICU Care and Ventilation Management, Clinical Management, Infection Prevention through PPE, Quarantine and Isolation, Laboratory Sample Collection and Testing etc.

Hence, option (a) is the correct answer.

QUESTION) With reference to iGOT e-learning platform, consider the following statements:

1. It provides self-contained training material for COVID-19 warriors comprising 56 modules, 196 videos and 133 training documents.
2. It is launched by Ministry of Education.

Which of the statements given above is/are correct?

(A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- (B) 2 only
(C) Both 1 and 2
(D) Neither 1 nor 2
:Correct: A

QUESTION) With reference to e-Invoice, consider the following statements:

1. The e-invoice system under goods and services tax (GST) was launched on October 1, 2020.
2. Around 15% of the tax payers are using the offline tool for the IRN generations and 85% are integrating through API.

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

e-Invoice, a path breaking initiative completes one month on 31st October.

The e-invoice system under goods and services tax (GST) was launched on October 1, 2020 for the businesses with aggregate turnover of more than Rs 500 crore in the financial year.

According to NIC, within the first month of introduction itself, more than 495 Lakh e-invoices were generated on the NIC portal by 27,400 tax payers.

Currently, there are three modes of generations of IRN in NIC system.

First is the direct API interface of ERP system of tax payer with NIC system.

Second is the API interface of ERP system of the tax payer through GSP with NIC system.

Third is using the offline tool for bulk uploading of invoices and generating IRNs.

Around 15% of the tax payers are using the offline tool for the IRN generations and 85% are integrating through API.

Hence both statements are correct.

QUESTION) With reference to “Mission Sagar-II”, consider the following statements:

1. Mission Sagar-II, follows the first “Mission Sagar” undertaken in May-June 2020, wherein India reached out to Maldives, Mauritius, Seychelles, Madagascar and Comoros, and provided food aid and medicines.

2. As part of Mission Sagar-II, Indian Naval Ship Airavat will deliver food aid to Sudan, South Sudan, Djibouti and Eritrea.

Which of the statements given above is/are correct?

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: C

Explanation :

As part of 'Mission Sagar-II', Indian Naval Ship Airavat entered Port Sudan on 02 November 2020.

The Government of India is providing assistance to Friendly Foreign Countries to overcome natural calamities and COVID-19 pandemic, and towards the same INS Airavat is carrying a consignment of 100 Tonnes of food aid for the people of Sudan.

Mission Sagar-II, follows the first 'Mission Sagar' undertaken in May-June 2020, wherein India reached out to Maldives, Mauritius, Seychelles, Madagascar and Comoros, and provided food aid and medicines.

As part of Mission Sagar-II, Indian Naval Ship Airavat will deliver food aid to Sudan, South Sudan, Djibouti and Eritrea.

Hence both statements are correct.

QUESTION) Consider the following statements:

1. Recently India's public broadcaster Prasar Bharati entered into a MoU with Bhaskaracharya National Institute for Space Applications and Geo-Informatics.

2. Under the MoU, 51 DTH education TV channels will be available as DD co-branded channels to all DD FreeDish viewers.

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

Answer: C

Explanation :

In a landmark step, India's public broadcaster Prasar Bharati entered into a MoU with Bhaskaracharya National Institute for Space Applications and Geo-Informatics, Ministry of Electronics and Information Technology.

Under the MoU, 51 DTH education TV channels will be available as DD co-branded channels to all DD FreeDish viewers.

This move aims to bring quality educational programmes to every household, including those in rural and remote areas.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

The services will be available free of cost for all the viewers 24x7, in line with Government's commitment towards skill development and providing quality education to the last person in the country.

Hence both statements are correct.

QUESTION) With reference to IPBES report on future pandemics, consider the following statements:

1. The report notes that COVID-19 is at least the sixth pandemic to have taken place in the last century since the Great Influenza Pandemic of 1918.
2. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem (IPBES) was established by the United Nations, but functions independently

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

Answer: C

Explanation :

In a new report released by the IPBES, the authors have warned that future pandemics will emerge more often, they'll spread more rapidly, do more damage to the world and kill more people than COVID-19, unless significant measures are taken.

The report notes that COVID-19 is at least the sixth pandemic to have taken place in the last century since the Great Influenza Pandemic of 1918.

Three of the pandemics were caused by influenza viruses, one by HIV followed by SARS and COVID-19. While the current pandemic's origins lie in microbes carried by animals, "like all pandemics, its emergence has been entirely driven by human activities.

There are over 1.7 million currently 'undiscovered' viruses that exist in mammals and birds, out of which up to 827,000 could have the ability to infect people.

More than 70 per cent of emerging diseases, such as Ebola, Zika and Nipah, are caused by microbes found in animals that spill over due to contact among wildlife, livestock and people.

About 30 per cent of emerging infectious diseases are attributed to land use change, agricultural expansion and urbanisation.

The report suggests that pandemic risk can be lowered by reducing the human activities that drive loss of biodiversity, by greater conservation of protected areas and through measures that reduce unsustainable exploitation of high biodiversity regions.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem (IPBES) is an intergovernmental organization established to improve the interface between science and policy on issues of biodiversity and ecosystem services.

The IPBES was established by the United Nations, but functions independently.

Formation: 2012.

Headquarters: Bonn, Germany.

Hence both statements are correct.

QUESTION) With reference to the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict, consider the following statements:

1. It was observed on 2nd November.
2. In 2016, the United Nations Environment Assembly adopted a resolution which recognized the role of healthy ecosystems in reducing the risk of armed conflict.

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

Answer: B

Explanation :

International Day for Preventing the Exploitation of the Environment in War and Armed Conflict was observed on 6 November.

In 2001, the UN General Assembly declared 6 November of each year as the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict (A/RES/56/4).

In 2016, the United Nations Environment Assembly adopted a resolution which recognized the role of healthy ecosystems in reducing the risk of armed conflict.

It also reaffirmed its commitment to the implementation of the Sustainable Development Goals listed in General Assembly resolution entitled “Transforming our world: the 2030 Agenda for Sustainable Development”.

The United Nations Environment Programme (UNEP) has found that over the last 60 years, at least 40 percent of all internal conflicts have been linked to the exploitation of natural resources, whether high-value resources such as timber, diamonds, gold and oil, or scarce resources such as fertile land and water.

Hence only statement 2 is correct.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) With reference to Gov-Tech-Thon 2020, consider the following statements:

1. It is organized by IEEE, National Informatics Centre (NIC) and Oracle, under the aegis of the Ministry of Electronics and Information Technology (MeitY), Government of India.
2. IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

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

Answer: C

Explanation :

Gov-Tech-Thon 2020, a 36 hours, pan-India virtual hackathon organized by IEEE, National Informatics Centre (NIC) and Oracle, under the aegis of the Ministry of Electronics and Information Technology (MeitY), Government of India, witnessed a successful conclusion on 1st November, 2020.

Shortlisted 447 enthusiasts from 100 teams participated in the Hackathon on the five problem statements provided by 3 central Government Ministries – Ministry of Agriculture and Farmers'

Welfare, Ministry of Road Transport and Highway and Ministry of Education.

National Informatics Centre (NIC) is attached office of Ministry of Electronics and Information Technology (MeitY). NIC was established in 1976.

IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

The Oracle Cloud offers a complete suite of integrated applications for Sales, Service, Marketing, Human Resources, Finance, Supply Chain etc.

Hence both statements are correct.

QUESTION) With reference to the Atal Beemit Vyakti Kalyan Yojana (ABVKY), consider the following statements:

1. It is a welfare measure being implemented by Union Ministry of Rural Development.
2. It offers cash compensation to insured persons when they are rendered unemployed.

Which of the statements given above is/are correct?

- (A) 1 only
(B) 2 only
(C) Both 1 and 2

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(D)Neither 1 nor 2

Answer: B

Explanation :

Ministry of Labour and Employment said that submitting claims through Affidavit Form is now no longer required under Atal Beemit Vyakti Kalyan Yojana (ABVKY) of Employees' State Insurance Corporation- ESIC.

Atal Bimit Vyakti Kalyan Yojana is a welfare measure being implemented by the Employee's State Insurance (ESI) Corporation.

It offers cash compensation to insured persons when they are rendered unemployed.

The scheme provides relief to the extent of 50% of the average per day earning during the previous four contribution periods (total earning during the four contribution period/730) to be paid up to maximum 90 days of unemployment once in lifetime of the Insured Person.

The Scheme was introduced w.e.f. 01-07-2018. The ESI Corporation in its meeting held in August this year had extended the Atal Beemit Vyakti Kalyan Yojana' from 1st of July, 2020 to 30th June,2021.

Hence, option (b) is the correct answer.

QUESTION) With reference to the US presidential election 2020, consider the following statements:

1. Democrat Joe Biden has been declared the winner of the 2020 US presidential election, defeating Donald Trump, to become the 42nd President of the United States.
2. Democratic Party candidate Kamala Harris has secured her position as the first woman to be the Vice President of the USA.

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

Answer: B

Explanation :

Democrat Joe Biden has been declared the winner of the 2020 US presidential election, defeating Donald Trump, to become the 46th President of the United States.

With the declaration of Joe Biden as the President-Elect based on the projections of the electoral votes, Democratic Party candidate Kamala Harris has also secured her position as the first woman to be the Vice President of the USA.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Ms. Harris, is also credited to be the first woman of Indian-American and African-American origin to be a member of the United States Senate.

QUESTION) With reference to other service providers (OSP), consider the following statements:

1. The new rules do away with the registration requirement for OSPs, with such BPOs that are engaged only in data work have been taken out of the category of OSPs altogether.
2. The doing away of registration norms will also mean that there will be no renewal of such licenses.

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

Answer: C

Explanation :

The Department of Telecom eased rules for other service providers (OSP) in the business process outsourcing (BPO) and information technology-enabled services (ITes).

OSPs or other service providers are companies or firms which provide secondary or tertiary services such as telemarketing,

telebanking or telemedicine for various companies, banks or hospital chains, respectively.

The new rules do away with the registration requirement for OSPs, with such BPOs that are engaged only in data work have been taken out of the category of OSPs altogether.

With the government recognising OSP employees as extended or remote agent, companies providing such services will no longer have to carry the additional compliance burden of providing the details of all such employees to the DoT.

The doing away of registration norms will also mean that there will be no renewal of such licenses and therefore will invite foreign companies to set up or expand their other service providing units in India.

An important change, which takes data-based OSPs completely out of the ambit of BPOs would mean that such firms can function like any other service firm without the strict and cumbersome guidelines such as presence of agent on location.

Hence both statements are correct.

QUESTION) With reference to Himachal Pradesh's Freedom of Religion Bill, 2019, consider the following statements:

1. The Act cover a person re-converting to his "parent religion".

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

2. Any marriage done for the sole purpose of religion conversion may be declared null and void by a court on a petition by either party.

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

Answer: B

Explanation :

Haryana Home Minister said that his government is considering a law against forced religious conversions and has sought information about such a law already in force in Himachal Pradesh.

Last year, the Himachal Pradesh assembly passed the Freedom of Religion Bill, 2019.

According to it, no person shall convert any other person from one religion to another by use of misrepresentation, force, undue influence, coercion, inducement or by any fraudulent means or by marriage; nor shall any person abet or conspire such conversion.

The Act does not cover a person re-converting to his “parent religion”.

Any marriage done for the sole purpose of religion conversion may be declared null and void by a court on a petition by either party.

Anyone who wishes to convert to any other religion will give a declaration to the district authorities at least one month in advance, specifying that one is doing so as per his/her “own volition or free consent”.

The burden of proof as to whether a religious conversion was not effected through force or fraud lies on the person so converted, or the person who has facilitated the conversion.

All offences under the Act are cognizable and non-bailable. The violator can be punished with a prison term ranging from one to five years, along with a fine.

Hence only statement 2 is correct.

QUESTION) With reference to Stanford University’s list of top 2 per cent Scientists, consider the following statements:

1. In the exhaustive list of 1,59,683 persons, 1,492 Indians have found a place, with a majority of them being from IITs and IISc and other top institutes.
2. In the field of Nuclear & Particle Physics, there are two Indians: Ashoke Sen (ranked 13) and T. Padmanabhan (ranked 24).

Which of the statements given above is/are correct?

- (A) 1 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: C

Explanation :

Stanford University has recently released a list that represents the top 2 per cent of the most-cited scientists in various disciplines. The exhaustive list has 1,59,683 persons with nearly 1,500 Indians in it.

This database includes the top 2 percent of scientists of the world from different fields on the basis of standardized citation indications. These include information on the number of citations, H -Index, co-authorship and a composite indicator.

In the exhaustive list of 1,59,683 persons, 1,492 Indians have found a place, with a majority of them being from IITs and IISc and other top institutes.

There were 16 Indian scientists who are ranked 30 or higher in the world, in their respective fields.

In the field of Nuclear & Particle Physics, there are two Indians: Ashoke Sen (ranked 13) and T. Padmanabhan (ranked 24).

There are two Indian in the field of Inorganic and Nuclear Chemistry: Prof Gautam Desiraju, (ranked 2) and CNR Rao (ranked 3) close to the top.

Biotechnology also has two names: Dr Ashok Pandey, (ranked 8) and Dr S Venkata Mohan, (rank 29).

Hence both statements are correct.

QUESTION) Which of the following pollutants are monitored under System of Air Quality and Weather Forecasting and Research (SAFAR)?

1. PM1

2. Methane

3. Benzene

Select the correct answer using the code given below:

(A) 1 only

(B) 1 and 2 only

(C) 2 and 3 only

(D) 1, 2 and 3

Answer: D

Explanation :

The air quality in Delhi continues to remain in 'severe' category. The System of Air Quality and Weather Forecasting and Research, SAFAR has advised people to avoid all physical activity outdoors.



EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

It was indigenously developed by Indian Institute of Tropical Meteorology, Pune and is run by India Meteorological Department (IMD).

Objective: To provide Real-time air quality index on 24x7 basis with colour coding along with 72-hour advance weather forecast; To issue Health advisory to prepare citizens well in advance.

Parameters monitored:

Pollutants: PM1, PM2.5, PM10, Ozone, CO, NO_x (NO, NO₂), SO₂, BC, Methane (CH₄), Non-methane hydrocarbons (NMHC), Black Carbon, VOC's, Benzene and Mercury.

Meteorological Parameters: UV Radiation, Rainfall, Temperature, Humidity, Wind speed, Wind direction, solar radiation.

Hence, option (d) is the correct answer.

QUESTION) With reference to Thirty Meter Telescope project, consider the following statements:

1. Thirty Meter Telescope (TMT) project is being installed at Beijing.
2. TMT project is an international partnership between CalTech, Universities of California, Canada, Japan, China, and India; through the Department of Science and Technology (DST) and Department of Atomic Energy (DAE).

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

Answer: B

Explanation :

2020 Physics Nobel Laureate Prof. Andrea Ghez had worked closely with Indian astronomers on the design of back-end instruments and possible science prospects of the Thirty Meter Telescope (TMT) project being installed at Maunakea in Hawaii.

TMT project is an international partnership between CalTech, Universities of California, Canada, Japan, China, and India; through the Department of Science and Technology (DST) and Department of Atomic Energy (DAE).

“Thirty Metre” refers to the 30-metre diameter of the mirror, with 492 segments of glass pieced together.

Significance:

Once completed, it would be three times as wide as the world's largest existing visible-light telescope. The larger the mirror, the more light a telescope can collect, which means, in turn, that it can “see” farther, fainter objects.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

It would be more than 200 times more sensitive than current telescopes, and would be able to resolve objects 12 times better than the Hubble Space Telescope.

One of its key uses will be the study of exoplanets, many of which have been detected in the last few years, and whether their atmospheres contain water vapour or methane — the signatures of possible life.

Already the site of a number of observatories and 13 large telescopes, Mauna Kea is considered sacred by native Hawaiians who believe that such constructions defile the Mauna Kea mountain.

If the Thirty Metre Telescope cannot be built on Mauna Kea mountain in Hawaii, Spain's Canary Islands is a backup site.

Hence only statement 2 is correct.

QUESTION) Consider the following statements:

1. The Centre would borrow from the market and then act as an intermediary to arrange back-to-back loans to pay the GST compensation shortfall of Rs 1.1 lakh crore to state governments.
2. Under the special window, the Centre has already borrowed Rs 12,000 crore in two equal instalments and passed it on to 21 states and three Union Territories.

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

Answer: C

Explanation :

After Puducherry, Congress-ruled Rajasthan last week became the latest Opposition-ruled state to opt for a special borrowing window for meeting its compensation shortfall under Goods and Services Tax (GST).

The Finance Ministry had said last month that the Centre would borrow from the market and then act as an intermediary to arrange back-to-back loans to pay the GST compensation shortfall of Rs 1.1 lakh crore to state governments. This arrangement will not reflect in the fiscal deficit of the Centre, and will appear as capital receipts for state governments.

How has the scheme progressed so far?

Under the special window, the Centre has already borrowed Rs 12,000 crore in two equal instalments and passed it on to 21 states and three Union Territories on October 23 and November 2.

The second round of borrowing was done at an interest of 4.42%, and the first round at 5.19%, lower than the cost of borrowing for states.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Hence both statements are correct.

QUESTION) With reference to the AatmaNirbhar Bharat 3.0, consider the following statements:

1. ₹3,000 Crore boost is being provided to EXIM Bank for promoting project exports under Indian Development and Economic Assistance Scheme (IDEAS Scheme).

2. ₹900 Crore is being provided to Department of Biotechnology for Research and Development of Indian COVID Vaccine.

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

Answer: C

Explanation :

Union Minister for Finance & Corporate Affairs Smt. Nirmala Sitharaman has announced 12 key measures, as part of Government of India's stimulus to the economy, under AatmaNirbhar Bharat 3.0.

QUESTION) With reference to the Emergency Credit Line Guarantee Scheme, consider the following statements:

1. Emergency Credit Line Guarantee Scheme for MSMEs, businesses, MUDRA borrowers and individuals (loans for business purposes), has been extended till March 31, 2021.

2. Entities will get additional credit up to 20% of outstanding credit with a tenor of five years, including 1 year moratorium on principal repayment.

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

Answer: C

Explanation :

Emergency Credit Line Guarantee Scheme for MSMEs, businesses, MUDRA borrowers and individuals (loans for business purposes), has been extended till March 31, 2021.

QUESTION) Which of the following pairs is/are correctly matched?

Tribe : State

1. Sarna - Jharkhand

2. Angami - Tamil Nadu

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

3. Santhal - Kerala

Select the correct answer using the code given below:

- (A) 1 only
- (B) 1 and 2 only
- (C) 2 and 3 only
- (D) 1, 2 and 3

Answer: A

Explanation :

Recently the Jharkhand government convened a special session and passed a resolution to send the Centre a letter to recognise Sarna religion and include it as a separate code in the Census of 2021.

The followers of Sarna faith believe pray to nature. The holy grail of the faith is “Jal, Jungle, Zameen” and its followers pray to the trees and hills while believing in protecting the forest areas. Jharkhand has 32 tribal groups of which eight are from Particularly Vulnerable Tribal Groups. While many follow Hindu religion, some have converted to Christianity — this has become one of the planks of demanding a separate code “to save religious identity” — as various tribal organisations put it. It is believed that 50 lakhs tribal in the entire country put their religion as ‘Sarna’ in the 2011 census, although it was not a code.

The Angami Nagas are one of the major tribes of Nagaland, widely present in the district of Kohima.

The Santhal tribes are the major tribes of West Bengal and are mostly seen in the districts of Bankura and Purulia. They are also widely seen in parts of Bihar, Jharkhand, Odisha and Assam.

Hence, option (a) is the correct answer.

QUESTION) With reference to the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), consider the following statements:

1. ICRISAT is an international organization which conducts agricultural research for rural development.
2. It is headquartered in Delhi.

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

Answer: A

Explanation :

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Ministry of Civil Aviation (MoCA) and Directorate General of Civil Aviation (DGCA) have granted conditional exemption to the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad, Telangana for the deployment of drones for agricultural research activities.

ICRISAT is an international organization which conducts agricultural research for rural development.

It is headquartered in Patancheru (Hyderabad, Telangana) with several regional centers (Bamako (Mali), Nairobi (Kenya)) and research stations (Niamey (Niger), Kano (Nigeria), Lilongwe (Malawi), Addis Ababa (Ethiopia), Bulawayo (Zimbabwe)).

It was founded in 1972 by a consortium of organisations convened by the Ford and the Rockefeller foundations. Its charter was signed by the FAO and the UNDP.

Since its inception, host country India has granted a special status to ICRISAT as a UN Organization operating in the Indian territory making it eligible for special immunities and tax privileges.

ICRISAT is managed by a full-time Director General functioning under the overall guidance of an international Governing Board.

Hence only statement 1 is correct.

QUESTION) With reference to the “pincer” catalytic systems, consider the following statements:

1. Tiny amounts of these “pincer catalysts” repeatedly convert large amounts of industrial waste such as glycerol into lactic acid and hydrogen.
2. Such catalysts also efficiently convert bioethanol, a low-energy density fuel, into high-energy density butanol.

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

Answer: C

Explanation :

A research team of IIT Guwahati has formulated efficient “pincer” catalytic systems that transform biomass wastes into valuable chemicals.

Tiny amounts of these “pincer catalysts” repeatedly convert large amounts of industrial waste such as glycerol into lactic acid and hydrogen.

Such catalysts also efficiently convert bioethanol, a low-energy density fuel, into high-energy density butanol.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

The conversion of valuable intermediates such as glycerol and ethanol, produced during the processing of biomass, into industrially useful chemicals has elicited much interest worldwide.

Hence both statements are correct.

QUESTION) With reference to the Pradhan Mantri Formalisation of Micro food processing Enterprises scheme (PM-FME Scheme), consider the following statements:

1. It is a central sector scheme.
2. It aims to enhance the competitiveness of existing individual micro-enterprises in the unorganized segment of the food processing industry.

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

Answer: B

Explanation :

Union Minister for Food Processing Industries inaugurated the capacity building component of the Pradhan Mantri Formalisation of Micro food processing Enterprises scheme (PM-FME Scheme).

Launched under the Aatmanirbhar Bharat Abhiyan, the PM-FME Scheme is a centrally sponsored scheme.

It aims to enhance the competitiveness of existing individual micro-enterprises in the unorganized segment of the food processing industry and promote formalization of the sector and provide support to Farmer Producer Organizations, Self Help Groups, and Producers Cooperatives along their entire value chain.

With an outlay of Rs. 10,000 crore over a period of five years from 2020-21 to 2024-25, the scheme envisions to directly assist the 2,00,000 micro food processing units for providing financial, technical, and business support for upgradation of existing micro food processing enterprises.

Hence only statement 2 is correct.

QUESTION) With respect to “Awaas Diwas”, consider the following statements:

1. It is celebrated to commemorate the launch of Pradhan Mantri Awaas Yojana - Gramin (PMAY-G).
2. Pradhan Mantri Awaas Yojana - Gramin (PMAY-G) aims to provide “Housing for All” by 2022.

Which of the statements given above is/are correct?

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: C

Explanation :

Union Rural Development Minister interacted with Rural Development Ministers and officials of the States on the occasion of “Awaas Diwas” celebration.

The Rural Housing Scheme, Pradhan Mantri Awaas Yojana - Gramin (PMAY-G) was launched by the Prime Minister Narendra Modi on 20th of November 2016 at Agra, Uttar Pradesh. To commemorate the launch of PMAY-G, which aims to provide “Housing for All” by 2022, it was decided to celebrate 20th November every year as Awaas Diwas. Hence both the statements are correct.

The program envisages the completion of 2.95 crore houses with all basic amenities by the year 2022. In the first phase of the scheme from 2016-17 to 2018-19, a target for construction of one crore pucca houses were set. In the second phase of the scheme starting from 2019-20 to 2021-22, the target of construction of the remaining 1.95 crore houses has been set.

Hence option(c) is correct.

QUESTION) The Virtual Court (traffic) and e-Challan project have been recently inaugurated in which of the following north eastern states?

- (A) Nagaland
- (B) Assam
- (C) Sikkim
- (D) Tripura

Answer: B

Explanation :

The Virtual Court (traffic) and e-Challan project have been recently (12th November, 2020) inaugurated in Assam by the chief minister of Assam. Hence option (b) is correct.

The Information and Communication Technology (ICT) Committee of Gauhati High Court in association with Government of Assam and Assam Police, under the aegis of e-Committee of Supreme Court of India, are spearheading the project in the State.

E-challan solution is an initiative of the Union Ministry of Road Transport and Highways (MoRTH) whereas the software has been developed by National Informatics Centre (NIC). It will replace the present concept of manual challan with an electronically generated digital challan.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Virtual court is an initiative of E-Committee of Supreme Court along with Department of Justice, Ministry of Law & Justice. It is an online court being managed by Virtual Judge (which is not a person but an algorithm) whose jurisdiction can be extended to entire state and working hours may be 24x7.

QUESTION) With respect to “Sustainable Alternative Towards Affordable Transportation (SATAT)”, consider the following statements:

1. It provides for generating gas from municipal waste as well as forest and agri waste.
2. The gas produced at compressed bio-gas plants can be used as fuel to power automobiles.

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

Answer: C

Explanation :

India will see an investment of Rs 2 lakh crore in setting up 5,000 plants that will produce gas from bio and crop wastes by 2023-24,

To boost the availability of affordable and clean transport fuel, an agreement was signed for setting up 900 compressed bio-gas or CBG plants by companies such as Adani Gas and Torrent Gas. Under the Sustainable Alternative Towards Affordable Transportation (SATAT) initiative, the government is looking at setting up of 5,000 CBG plants by 2023-24 with a production target of 15 million tonnes, an official statement said.

Hence statement 1 is correct: It provides for generating gas from municipal waste as well as forest and agri waste. Animal husbandry and marine wastes are also included.

Hence statement 2 is correct: The gas produced at CBG plants can be used as fuel to power automobiles. The policy provides for guaranteed offtake of the gas produced at the CBG plants by the state-owned firms.

QUESTION) With respect to “Micro Irrigation Fund”, consider the following statements:

1. The objective of the Fund is to facilitate the States in availing an interest sub-vented loan for expanding coverage of Micro Irrigation.
2. It is a corpus of Rs. 5000 crore created with NABARD.

Which of the statements given above is/are correct?

- (A) 1 only
- (B) 2 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

(C)Both 1 and 2

(D)Neither 1 nor 2

Answer: C

Explanation :

NABARD has so far released a total amount of Rs. 1754.60 crore Interest Sub-vented Loan from Micro-Irrigation Fund (MIF).

Hence statement 2 is correct: Micro Irrigation Fund with a corpus of Rs. 5000 crore created with NABARD was operationalised in 2019-20.

Hence statement 1 is correct: The objective of the Fund is to facilitate the States in availing an interest sub-vented loan for expanding coverage of Micro Irrigation by taking up projects and also for incentivising micro irrigation beyond the provisions available under PMKSY-Per Drop More Crop to encourage farmers to install micro irrigation systems.

Hence option(c) is correct.

QUESTION) With reference to the Gupkar Declaration, consider the following statements:

1. It is a political alliance between the multiple mainstream regional political parties of Jammu and Kashmir.
2. It aimed at safeguarding and restoring special status along with Article 35A of the erstwhile state of Jammu and Kashmir.

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

Answer: C

Explanation :

Ever since the Congress party initiated talks with the People's Alliance for Gupkar Declaration (PAGD) for the November-December District Development Council (DDC) elections, the BJP has been on a tirade against the leaders of what it calls the "Gupkar Gang".

People's Alliance for Gupkar Declaration (PAGD) was formerly known as Gupkar Declaration.

It is a political alliance between the multiple mainstream regional political parties of Jammu and Kashmir aimed at safeguarding and restoring special status along with Article 35A of the erstwhile state of Jammu and Kashmir.

First Declaration: The Declaration signed on 4 August 2019 stated that modification or abrogation of Article 35A or Article 370 would be aggression against the people of J&K. The venue was the Gupkar Residence in Srinagar and thus it became known as the Gupkar Declaration.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Gupkar Declaration II: Gupkar Declaration II, signed on 22 August 2020 by the six political parties asserted that the signatories were bound by August 4, 2019 Gupkar declaration and parties would strive for restoration of Article 370 and Article 35a.

Hence both statements are correct.

QUESTION) With reference to the deemed forests, consider the following statements:

1. The concept of deemed forests has been clearly defined in the Forest Conservation Act of 1980.
2. The Supreme Court in the case of T N Godavarman Thirumalpad (1996) accepted a wide definition of forests under the Forest Conservation Act.

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

Answer: B

Explanation :

Karnataka Forest Minister announced in the Assembly that the state government would soon declassify 6.64 lakh hectares of the

9.94 lakh hectares of deemed forests in the state (nearly 67%) and hand it over to Revenue authorities.

While the concept of deemed forests has not been clearly defined in any law including the Forest Conservation Act of 1980, the Supreme Court in the case of T N Godavarman Thirumalpad (1996) accepted a wide definition of forests under the Act.

“The word ‘forest’ must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2 (1) of the Forest Conservation Act,” the Supreme Court said in its December 12, 1996 order.

“The term ‘forest land’ occurring in Section 2 will not only include ‘forest’ as understood in the dictionary sense, but also any areas recorded as forest in the government record irrespective of the ownership.

The provisions enacted in the Forest Conservation Act 1980 for the conservation of forest and the matters connected therewith must apply clearly to all forest so understood irrespective of the ownership or classification thereof,” the court said.

The issue of deemed forests is a contentious one in Karnataka, with legislators across party lines often alleging that large amounts of agriculture and non-forest land are “unscientifically” classified as such.

Hence only statement 2 is correct.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

QUESTION) Consider the following statements regarding cultivation of tea:

1. In India, tea cultivation started in Darjeeling.
2. Tea leaves are rich in caffeine and tannin.
3. Robusta is a variety of tea grown in India.
4. Assam contributes more than half of total tea produced in India.

Which of the statements given above is/are correct?

- (A) 1 and 4 only
(B) 2 and 3 only
(C) 2 and 4 only
(D) All of the above

Answer: C

Exp: • Tea is a plantation crop used as beverage. It is grown over undulating topography of hilly areas and well drained soils in humid and sub-humid tropics and sub-tropics. In India, tea plantation started in 1840s in Brahmaputra valley of Assam which still is a major tea growing area in the country. Later on, its plantation was introduced in the sub-Himalayan region of West Bengal (Darjeeling, Jalpaiguri and Cooch Bihar districts). Tea is also cultivated on the lower slopes of Nilgiri and Cardamom hills in Western Ghats.

- Tea leaves have rich content of caffeine and tannin.

- Robusta is a variety of Coffee.

• Assam accounts for about 53.2 per cent of the total cropped area and contributes more than half of total production of tea in the country. West Bengal and Tamil Nadu are the other leading producers of tea.

QUESTION) Consider the following statements regarding Agricultural and Processed Food Products Export Development Authority (APEDA):

1. It is a statutory body established under The Agricultural and Processed Food Products Export Development Authority (APEDA) Act.
2. It is an export promotion organization under the joint control of Ministry of Agriculture and Ministry of Food Processing Industry.

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

Answer: A

Exp: It is an export promotion organization under Ministry of Commerce & Industries. It is mandated with the responsibility of

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

promotion and development of the export of its scheduled products.

It was established under the Agricultural and Processed Food Products Export Development Authority Act, 1985

QUESTION) Consider the following statements regarding the term “Ever Green Revolution”

1. It was coined by Dr. M.S Swaminathan.
2. It calls for increase in productivity by practicing sustainable farming by integrating ecology with technology.
3. It calls for extension of Green Revolution practices to all the parts of India and for all crops, not just rice and wheat.

Which of the statements given above is/are correct?

- (A) 1 and 2 only
(B) 2 only
(C) 3 only
(D) 1, 2 and 3

Answer: A

Exp: • Dr. M.S Swaminathan coined the term “Evergreen Revolution” to highlight the pathway of increasing production and productivity in a manner such that short and long term goals of food production are not mutually antagonistic.

- He wants to produce more from less, less land, less pesticide, less water and it must be an evergreen revolution to get sustainable agriculture.

- He started working on three main areas in support of this revolution, better disease crops, better soil health and fertility without having to resort to chemical fertilizers and the use of biological controls to reduce damage caused by pests.

QUESTION) Which of the following best describes “photoperiodism”?

- (a) The physiological response of organisms to length of day or night.
(b) Reaction of certain plants to touch by animals.
(c) The growth of plants either upwards or downwards as a response to gravity.
(d) Production and emission of light by a living organism.

Answer: A

Photoperiodism is the physiological reaction of organisms to the length of day or night. It occurs both in plants and animals. Photoperiodism can also be defined as the developmental responses of plants to the relative lengths of light and dark periods.

Chronobiology is a field of biology that examines periodic (cyclic) phenomena in living organisms and their adaptation to solar- and

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

lunar related rhythms. These cycles are known as biological rhythms. Scotobiology describes the study of biology as directly and specifically affected by darkness. This includes work on the effects of darkness on the behavior and metabolism of animals, plants, and microbes.

Bioluminescence is the production and emission of light by a living organism. It is a form of chemiluminescence. Bioluminescence occurs widely in marine vertebrates and invertebrates, as well as in some fungi, microorganisms including some bioluminescent bacteria and terrestrial invertebrates such as fireflies.

QUESTION) With reference to chemistry, the term Aqua regia refers to

- (a) a soft sulfate based mineral widely used as a fertilizer.
- (b) a steel alloy notable for its corrosion resistance.
- (c) a mixture of concentrated hydrochloric acid and nitric acid which can dissolve gold.
- (d) phosphorus-containing organic chemical that disrupt the mechanisms by which nerves transfer messages to organs.

Answer: C

Aqua regia is a freshly prepared mixture of concentrated hydrochloric acid and nitric acid in the ratio of 3:1. It is a highly corrosive, fuming liquid. It can dissolve gold, even though neither of the acids can do so alone. It is one of the few reagents that is able to dissolve gold and platinum.

QUESTION) With reference to the transport of nutrients in plants, consider the following statements:

1. Xylem transports water-dissolved minerals unidirectionally from roots to the stems.
2. Phloem transports organic and mineral nutrients bidirectionally between roots and stems.

Which of the statement given above is/are correct?

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

Answer: C

In a flowering plant, the substances that would need to be transported are water, mineral nutrients, organic nutrients and plant growth, regulators. Over small distances, substances move by diffusion and by cytoplasmic streaming supplemented by active transport. Transport over longer distances proceeds through the vascular system (the xylem and the phloem) and is called translocation.

In rooted plants, transport in xylem (of water and minerals) is essentially unidirectional, from roots to the stems.

EKLAVYA 360°PRELIMS PROGRAM – TEST 11 Explanation

Organic and mineral nutrients, however, undergo multidirectional transport in the phloem. Organic compounds synthesized in the photosynthetic leaves are exported to all other parts of the plant including storage organs. From the storage organs, they are later re-exported. The mineral nutrients are taken up by the roots and transported upwards into the stem, leaves and the growing regions.

QUESTION) Consider the following statements with reference to phytoremediation

1. It involves using concentrated sunlight to treat contaminated soil and water.
2. It can be used both in situ and ex situ.

Which of the statements given above is/are correct?

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

Solution (b)

Phytoremediation is the direct use of living green plants for removal, degradation, or containment of contaminants in soils, sludges, sediments, surface water and groundwater.

Phytoremediation is:

- A low cost, solar energy driven cleanup technique.
- Most useful at sites with shallow, low levels of contamination.
- Useful for treating a wide variety of environmental contaminants.
- Effective with, or in some cases, in place of mechanical cleanup methods.

It can be used both in-situ (by using these plants at the site of contamination) and ex-situ (by transferring contamination to these plants e.g. contaminated groundwater can be pumped to irrigate these plants which in turn will trap the contamination).