

UPSC Prelims Test Series 2020

Phase II, Test 12

Geography of India and World: Social& Economic

Q. No.	Ans	Q. No.	Ans	Q. No.	Ans
1	A	41	D	81	C
2	C	42	D	82	D
3	A	43	D	83	B
4	A	44	A	84	A
5	D	45	D	85	D
6	C	46	A	86	D
7	B	47	C	87	D
8	D	48	D	88	B
9	A	49	D	89	B
10	D	50	C	90	A
11	B	51	A	91	B
12	A	52	B	92	A
13	C	53	A	93	A
14	C	54	A	94	A
15	A	55	A	95	D
16	C	56	C	96	A
17	B	57	D	97	D
18	D	58	C	98	D
19	A	59	D	99	D
20	B	60	C	100	D
21	C	61	Cancelled		
22	A	62	A		
23	D	63	C		
24	C	64	D		
25	D	65	C		
26	A	66	A		
27	D	67	A		
28	D	68	A		
29	A	69	B		
30	D	70	A		
31	B	71	D		
32	A	72	D		
33	D	73	D		
34	A	74	A		
35	B	75	D		

36	C	76	A		
37	B	77	D		
38	D	78	B		
39	A	79	B		
40	D	80	A		

Que 1: A

Self-Explanatory

Que 2: C

Fertigation is a method of fertilizer application in which fertilizer is incorporated within the irrigation water by the drip system. In this system fertilizer solution is distributed evenly in irrigation. The availability of nutrients is very high therefore the efficiency is more. In this method liquid fertilizer as well as water soluble fertilizers are used. By this method, fertilizer use efficiency is increased from 80 to 90 per cent.

The benefits of fertigation over the conventional or drop fertilizing methods include increased nutrient absorption, reduction of fertilizer and water needed and greater control in the application of nutrients.

There is a reduction in soil erosion because the nutrients are pumped through the water drip system. Leaching of nutrients from the soil is also decreased.

Fertilizer used in fertigation: Urea, potash & highly water soluble fertilizers are available for applying through fertigation. Special fertilisers like mono ammonium phosphate (Nitrogen and Phosphorus), poly feed (NPK), Multi K (Nitrogen & Potassium), Potassium sulphate (Potassium and Sulphur) are highly suitable for fertigation as they are highly soluble in water. Fe, Mn, Zn, Cu, B, Mo are also supplied along with special fertilisers.

Que 3: A

About two-thirds of the world's monazite resources are found in beach sands of Indian Coasts from which Thorium is extracted.

Thorium is a fertile substance, but not a fissile substance by itself. It requires processing to make it usable in a nuclear reactor.

The process through which Thorium can be made usable in the reactor is a 3 stage process (Pressurized Heavy Water Reactors; Fast Breeder Reactors; Advanced Heavy Water reactors) which would convert it into Uranium-233 & only then it can be put into reactor assembly.

According to estimates, large-scale deployment of such thorium reactors is only expected by 2040.

India has been processing monazite & enough thorium has been stockpiled for the future use. No sanctions against extraction are imposed.

Que 4: A

Recently, the National Green Tribunal approved Vizhinjam International deep water Multipurpose Seaport project which is proposed to be developed as a transshipment hub. India's very first transshipment hub in the country is the the International Container Transshipment Terminal (ICTT) at Vallarpadam Cochin which has now reached the final stages of construction.

India is building the container transshipment ports to cut its dependence on facilities located in Colombo and Singapore to send and receive about a fourth of its annual container cargo. It is located in Kerala.

Que 5: D

The rare earth elements are all metals, and the group is often referred to as the “rare earth metals.” These metals have many similar properties, and that often causes them to be found together in geologic deposits. They are also referred to as “rare earth oxides” because many of them are typically sold as oxide compounds.

Scandium, a silvery-white metal, is a non-lanthanide rare earth. It is used in many popular consumer products, such as televisions and fluorescent or energy-saving lamps. In industry, the primary use of scandium is to strengthen metal compounds. The only concentrated sources of scandium currently known are in rare minerals such as thortveitite, euxenite, and gadolinite from Scandinavia and Madagascar.

India’s current rare earths production industry is far below its potential. The country holds almost 35 percent of the world’s total beach sand mineral deposits, which are significant sources of rare earths.

In India, monazite is the principal source of rare earths and thorium.

Que 6: C

Bogibeel Bridge

- It has been built over the Brahmaputra river in the north eastern Indian state of Assam between Dibrugarh district and Dhemaji district.
- The Bogibeel Bridge was a part of Assam Accord 1985 and was sanctioned in 1997-98. European codes and welding standards were adhered.
- It will reduce travel time between the Assam and Arunachal Pradesh significantly.
- The bridge is part of infrastructure projects to improve logistics along the border in Arunachal Pradesh such as construction of a trans -Arunachal highway on the north bank of the Brahmaputra, and new road and rail links over the river and its major tributaries.
- It will ensure greater integration of the north east region with the country and help in reducing sense of alienation from rest of India.
- The construction of the bridge also assumes strategic importance as it will facilitate the rapid movement of of army logistics.

Diffo bridge

Defence Minister recently inaugurated girder bridge over Diffo river in Arunachal Pradesh. It is a pre-Stressed Concrete Box Girder type bridge.

- It will be undertaken by the Border Roads Organisation.

The Diffo bridge will provide for uninterrupted access between Dibang Valley and Lohit valley region of Eastern Arunachal Pradesh together with providing all weather road for army movement.

Atal Setu

Union Transport Minister inaugurated Atal Setu built on Mandovi River in Goa.

Atal Setu is 5.1-km long cable-stayed four-lane bridgweighing 2.5 lakh tones.

Que 7: B

SELF EXPLANATORY

Que 8: D

India is the world's largest producer.

The government decided to declare the Year 2018 as "National Year of Millets" to boost production of the nutrient-rich millets and the sunrise agri industry (an emerging industry with bright growth potential) involved in it.

Government announces minimum support prices (MSPs) for millets like Sorghum (jowar), Pearl millet (Bajra) and finger millet (ragi).

Maharashtra is largest producer.

Que 9: A

Masai (Kenya, Tanzania and Uganda) and Hausa (Nigeria) are tribes living in Savanna climate. While Masai are pastoralist, Hausa are settled cultivators.

Bedouin (Arabian desert), Bushman (Kalahandi desert) and Aborigines (Australian desert) are some of hot desert tribes.

Pygmies (Congo basin) and Orang Asli (Malaysia) are from equatorial climate.

Eskimos (Greenland, Northern Canada and Alaska) are from Tundra climate.

Que 10: D

Gas hydrate or methane hydrate also referred by many as 'Fire on Ice' is a crystalline solid, an ice-like combination of natural gas entrapped in a cage of solidified water. They occur in subsurface deposits either in cold temperatures or under deep pressures in the sea. These deposits may be several hundred meters thick and generally occur in two types of settings: under Arctic / Antarctic permafrost and beneath the ocean floor in shallow sediments of outer continental margins. By some estimates they are the largest source of hydrocarbons on Earth. Those estimates put the global reserves at 8 billion Trillion Cubic Meters (TCM) of natural gas. This is several times higher than global reserves of 440 TCM of conventional gas.

There are certain challenges to its extraction. Most of the reserves are in areas with extreme water pressure or low temperatures making it difficult to carry out the extraction processes. Also, the extraction can destabilize the seabed leading to oceanic landslides, resulting in leakage of harmful methane gas in the atmosphere which is roughly 30 times more harmful than CO₂. This can add to problems of global warming. Another roadblock is the lack of technical expertise to extract the substance.

India has gas hydrates / methane hydrates reserve of 1894 Trillion Cubic Meters, especially in Godavari-Krishna Basin.

Que 11: B

The 'Four Waters' concept was developed by irrigation expert late T. Hanumantha Rao.

It has gained momentum in recent times, especially in states of Telangana and Andhra Pradesh. It is an innovative participatory indigenous technology in Watershed Development.

This Technology is named as “Four Waters Concept” since this is evolved by integrating the “Four Waters” rain water, soil moisture, ground water and, surface water.

The advantages of this technology, is that with the same cost, it is possible to increase the benefits three times more and increase the recharge to ground water ten times more than earlier.

The works proposed here can be executed by the farmers without the medium of contractors. The works can be executed by the watershed committees, without the usual preparations of plans and estimates by the field engineers. There is no cement-based work, like concrete, masonry, plastering, check dam etc., anywhere in the watershed. These works relate mainly to mini percolation tanks(30 to 40nos. in a watershed), sunken gully pits, C.C.Ts (Continuous Contour Trench)strictly along contour, Boundary bunds, Contour bunds, Percolation tank at head of gully and sub-surface dams. Vegetative methods are given equal importance in this technology. These pertain to raising cover crops (green manure) during Rabi and post Kharif seasons, tree plantations in all uncultivated lands and on all boundaries of fields, vegetable cover for gully slopes etc.

Que 12: A

Cold water fisheries: Fishing has been greatly developed in the northern hemisphere and the continental shelf of mid-latitude temperate seas have become the largest fishing grounds because of availability of plenty of important and specific species of fishes (like mackerels), relatively low content of oil and fat, large demand for fishes as human food, modern and advanced techniques and related means for fishing, provisions for canning and preservation of fishes etc.

Tropical and Sub-tropical fisheries: These are not so much developed but have high potential. Fishes in tropical and subtropical water have high fat and oil content, less demand for fish as human food, lack of abundance of single species of fishes in a specific area, mixed presence of several species in a place, low technological interventions etc. have discouraged the development of fisheries in the tropical and subtropical seas. Hence option (c) is the correct answer.

Tropical areas are, however, experiencing a continuously rising trend in production with catches of large (mostly tuna) and small pelagic species. Small pelagics in many developing countries are important for food security but in others are largely processed into fishmeal and fish oil.

Que 13: C

The National Register of Citizens (NRC) is a register of all Indian citizens whose creation is mandated by the 2003 amendment of the Citizenship Act, 1955. NRC is the register containing names of Indian Citizens. The only time that a NRC was prepared was in 1951 after conduct of the Census of 1951, the NRC was prepared by recording particulars of all the persons enumerated during that Census.

NPR is a Register of usual residents of the country containing demographic as well as biometric particulars. It is mandatory for every usual resident of India to register in the National Population Register. The objective of the NPR is to create a comprehensive identity database of every usual resident in the country. The data for National Population Register was collected in 2010 alongwith the houselisting phase of Census of India 2011. The NRC doesn't source its data from NPR.

Que 14: C

SECC 2011 was the first-ever caste-based census since 1931 Census of India, The SECC, 2011 has the following three objectives:

- To enable households (both rural and urban) to be ranked based on their socioeconomic status. State Governments can then prepare a list of families living below the poverty line.
- To make available authentic information that will enable caste-wise population enumeration of the country.
- To make available authentic information regarding the socio-economic condition and education status of various castes and sections of the population.

Que 15: A

Northeast Special Infrastructure Development Scheme is a central sector scheme with 100% funding by Union government launched to fill the gaps in creation of infrastructure under following sectors:-

- Physical infrastructure relating to water supply, power, connectivity and specially the projects promoting tourism;
- Infrastructure of social sectors of education and health.

The funds under the scheme, will be distributed among eight North Eastern States on the basis of well-defined criteria on certain parameters e.g. Area, Population, Human Development Index, Road density, etc.

Que 16: C

SELF EXPLANATORY

Que 17: B

Tea is a cash crop. It is a tropical and sub-tropical plant. It thrives well in a hot and humid climate with ideal temperature of 20-30 degree C and annual rainfall of 150-300 cm. However, temperatures above 35 degree and below 10 degree is harmful for the bush. It is a shade loving plant and develops more vigorously when planted along with shady trees.

Although tea requires heavy rainfall for its growth, stagnant water is injurious to its roots.

It requires well-drained soil for its cultivation. It is therefore, grown on the hill slopes where water drains away easily and waterlogging doesn't take place. However, it grows equally well in the valleys if the drainage is good.

India is the second largest producer of tea in the world after China. Some of the famous tea of India includes Assam and Darjeeling tea.

Que 18: D

Setu Bharatam Programme has been launched by the Ministry of Road Transport & Highways.

It is aimed at making all National Highways free of railway level crossings. This is being done to prevent the frequent accidents and loss of lives at level crossings.

Ministry of Road Transport & Highways has also developed an Indian Bridge Management System (IBMS) at the Indian Academy for Highway Engineer in Noida, U.P. The aim is to carry out conditions survey and inventorization of all bridges on National Highways in India by using Mobile Inspection Units.

Que 19: A

OIL, GAS FIELDS

FIG. 6



Bassein is located to the south of Mumbai High, this is a recent discovery endowed with reserves which may prove to be higher than those of the Mumbai High. Huge reserves have been found at a depth of 1,900 metre. Production has started and is expected to pick up fast.

Mumbai High:

The greatest success achieved by the ONGC with respect to offshore surveys for oil was that of Mumbai High in 1974. It is located on the continental shelf off the coast of Maharashtra about 176 km north-west of Mumbai.

Digboi Oilfields:

Located in the north-east of Tipam hills in Dibrugarh district of Upper Assam, Digboi is the oldest oil field of India. The oil bearing strata cover an area of about 13 sq km where oil is available at 400 to 2,000 metre depth.

Kalol Oilfields:

Kalol is located near Gandhinagar in Gujarat. It has an average elevation of 100 metres (328 feet). It is famous for its oil field. Oil and Natural Gas Corporation Ltd (ONGC) commenced spudding at the 700th well at Kalol oil field near Ahmedabad in August, 2017.

Que 20: B

Guar Gum is a major component used in fracking for extraction of Shale gas. The reason for its usage is its property as a thickening agent, which is then used to push fluids sideways in the fracking process. It helps in suspending “frac sand” and carrying it to the cracked rock. The sand then props up the opening, allowing the oil or gas to flow to the well.

Que 21:C

Ministry of Culture recently organized the Madhavpur Mela in Madhavpur Ghed, District Porbandar in Gujarat. The Madhavpur Mela of Gujarat shares its connection to the Mishmi Tribe of Arunachal Pradesh.

The Mishmi Tribe traces its ancestry to the legendary King Bhishmak and through him to his daughter Rukmini and Lord Krishna. The purpose of this integration is to bring various parts of the country especially the North-East, close to each other under the banner of Ek Bharat Shrestha Bharat announced by the Prime Minister.

The entire concept of celebration this year is in the spirit of ‘Ek Bharat Shrestha Bharat’ campaign and to symbolize the unity in diversity of the country and establish the East to West connect. All States and Union Territories except West Bengal are participating in the Ek Bharat Shrestha Bharat campaign and have been paired for the purpose of exchanges at the level of students, sports and through culture.

<https://indianexpress.com/article/india/gujarats-madhavpur-mela-to-showcase-cultural-integration-with-northeast-5109995/>

Que 22: A

Demographic dividend refers to the growth in an economy that is the result of a change in the age structure of a country's population. The change in age structure is typically brought on by a decline in fertility and mortality rates. Demographic dividend, as defined by the United Nations Population Fund (UNFPA) means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)".[1] In other words, it is “a boost in economic productivity that occurs when there are growing numbers of people in the workforce relative to the number of dependents.”

Que 23: D

Four key components of Sagarmala are:

1. Port Modernization & New Port Development
2. Port Connectivity Enhancement
3. Port-linked Industrialization
4. Coastal Community Development

Que 24: C

SELF EXPLANATORY

Que 25: D

SELF EXPLANATORY

Que 26: A

The per hectare productivity has increased in southern India due to closeness to sea and less difference in temperature as opposed to higher temperature in northern India which has led to decrease in per hectare productivity of sugarcane there.

The black soil of southern India holds water which is suitable for the production of sugarcane. Along with this, good transport facilities have also been affecting this positively.

Que 27: D

SELF EXPLANATORY

Que 28: D

SELF EXPLANATORY

Que 29: A

SELF EXPLANATORY

Que 30: D

Punganur cow is the smallest breeds of cattle, is said to be on the verge of extinction due to cross-breeding being conducted by farmers.

- The Punganur cow, found in Andhra Pradesh is diminutive, with a height of 70 cm to 90 cm and weighing around 115 to 200 kg.
- It has become a status symbol in recent years as wealthy livestock farmers began buying it, believing it brings good luck.

It shows declining trend in its population. Food and Agriculture Organisation (FAO) also recognizes this trend.

- The Livestock Research Station (LRS) at Palamaner in Chittoor district is said to be the last bastion of the breed.

Que 31: B

The occurrence of Fall Armyworm (FAW) has been recently reported from maize fields in Karnataka and also parts of Andhra Pradesh, Telangana, Tamil Nadu, Maharashtra and Gujarat.

- FAW (scientifically known as Spodoptera frugiperda) is a polyphagous (feeding on many foods) pest that has been seen in the Americas since several decades and in recent years it has also appeared many parts of Africa.
- There are two genetically identified strains, The M-strain (Maize) which attacks maize, sorghum and cotton and The R-strain(rice) which attacks rice, pasture, turf grass, Bermuda grass, millet and alfalfa, etc.

Que 32:A

The dedicated freight corridor is a green project. By shifting freight from road to rail, it will reduce fossil fuel usage and energy consumption in India's transport sector. So 3rd point is an advantage over road transport and not over normal corridors.

Que 33: D

SELF EXPLANATORY

Que 34: A

SELF EXPLANATORY

Que 35: B

SELF EXPLANATORY

Que 36: C

It is a storage of crude oil which would act as a cushion during any external supply disruptions or supply-demand mismatch shock.

- The crude oil storages are constructed in underground rock caverns and are located on the East and West coast of India. They are considered to be more environment friendly and incur less evaporation loss than ground level storage
- Construction of storage facilities are maintained by Indian Strategic Petroleum Reserves Limited (a special purpose vehicle of the Oil Industry Development Board under Ministry of Petroleum and Natural Gas).
- Presently, strategic reserves are situated at Visakhapatnam (Andhra Pradesh), Mangalore (Karnataka), and Padur (Kerala).

Moreover, project of three additional reserves is in pipeline -at Chandikhol (Odisha), Bikaner (Rajasthan).

Que 37: B

SELF EXPLANATORY

Que 38: D

Fazenda is a Brazilian plantation; especially a coffee plantation.

A ranch is an area of landscape, including various structures, given primarily to the practice of ranching, the practice of raising grazing livestock such as cattle or sheep for meat or wool.

Quarry is a deep pit, from which stone or other materials are or have been extracted.

Que 39: A

Kerala 96.6%

Punjab 92.2%

Gujarat 91.5%

Karnataka 66.2%
Tamil Nadu 86.7%

Source - https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/languagebr.pdf

Que 40: D

Tank is an artificial reservoir. Tank use is critical in parts of South India without perennial rainfall where water supply replenishment is dependent on monsoon seasons.

Most of the rivers of this region are seasonal and dry up in summer season. There are several streams which become torrential during rainy season. The only way to make best use of this water is to impound it by constructing bunds and building tanks. Otherwise this water would go waste to the sea.

Most of the tanks are natural and do not involve heavy cost for their construction. Even an individual farmer can have his own tank.

Tanks are generally constructed on rocky bed and have longer life span. In many tanks, fishing is also carried on. This supplements both the food resources and income of the farmer.

Que 41: D

SELF EXPLANATORY

Que 42: D

These crop varieties are grown and turned into the soil to improve its overall quality. The crop can be cut and then ploughed into the soil or simply left in the ground for an extended period prior to tilling. Examples include grass mixtures and legume plants.

Advantages:

1. Green manuring improves soil structure, increases water holding capacity and decreases soil loss by erosion.
2. Growing of green manure crops in the off season reduces weed proliferation and weed growth.
3. Green manuring helps in reclamation of alkaline soils and in tilling the soil.

Que 43: D

The age sex pyramid of a country show the age and sex composition of a population. If there is a broad base i.e. triangular it shows that people in young age group are more and it tapers towards the end which shows people in higher age group are less.

As one has bell shape thus constant width and constant population, also narrow base and tapered top shows declining population.

Que 44: A

They have majority of population as STs but not 100%.

Que 45: D

SELF EXPLANATORY

Que 46: A

Commercial livestock ranching is essentially associated with western cultures and is practiced on permanent ranches. New Zealand, Australia, Argentina, Uruguay and United States of America are imp countries.

Que 47: C

SELF EXPLANATORY

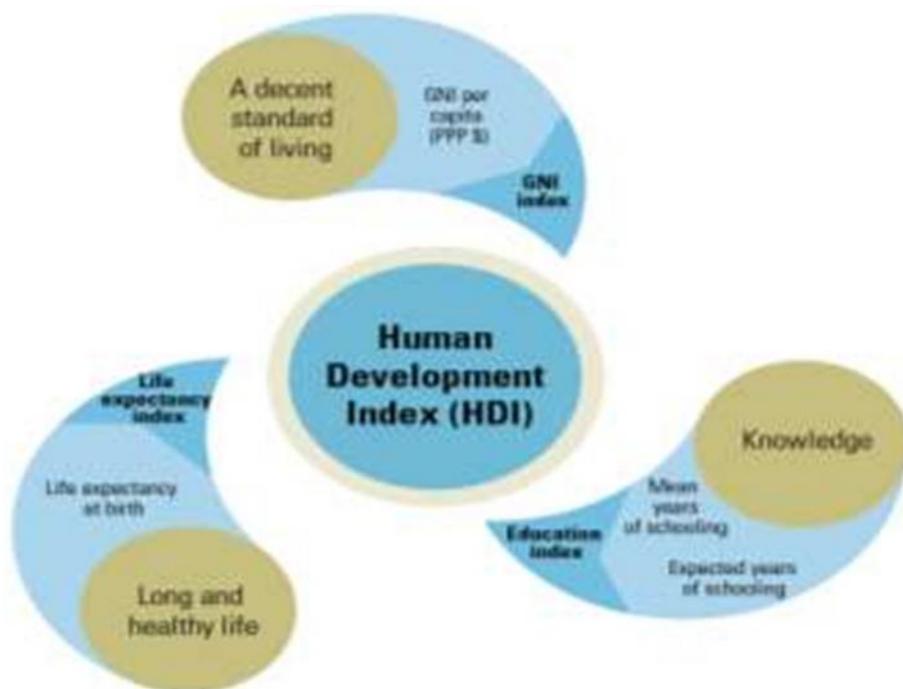
Que 48: D

SELF EXPLANATORY

Que 49: D

SELF EXPLANATORY

Que 50: C



Que 51: A

SELF EXPLANATORY

Que 52: B

Kuhls – Himachal Pradesh

Zabo – Nagaland

Panam Keni – Kuruma tribe, waynad

Que 53: A

SELF EXPLANATORY

Que 54: A

SELF EXPLANATORY

Que 55: A

SELF EXPLANATORY

Que 56: C

SELF EXPLANATORY

Que 57: D

SELF EXPLANATORY

Que 58: C

SELF EXPLANATORY

Que 59: D

Recently the Ministry of Civil Aviation released the draft Bill that seeks to implement the Cape Town Convention (Convention on International Interests in Mobile Equipment), and Protocol (Protocol to the Convention on Matters Specific to Aircraft Equipment) in India.

- The Cape Town Convention was adopted in 2001 under the joint auspices of International Civil Aviation Organisation (ICAO) and International Institute for the Unification of Private Law (UNIDROIT).
- The Convention is general in nature and is meant to be applied to three sectors, viz. Aviation, Railways and Space Equipment.
- India became a party to the convention /Protocol in July, 2008.

Que 60: C

Karnataka Government launches Data City

Programme to Solve Bengaluru's Problems. It is a 7 month long programme where the corporates, startups, government agencies and citizens will work mobility, water, waste management etc.

It is the first Data City programme launched in Asia.

Government agencies involved in this programme will not fund the project, but will only support corporates and startups.

Que 61: Cancelled

Akademik Lomonosov the world's first floating nuclear power plant is operational in Russia.

- It is basically a mobile, low-capacity reactor unit operable in remote areas isolated from the main power distribution system, or in places hard to access by land.
- They are designed to make it possible to supply electricity to hard-to-reach areas, regardless of transport infrastructure, landscape, and cost of fuel delivery.
- For fossil fuel-based electricity generation, up to 40 per cent of the cost is attributed to the price of coal, oil or gas, as well as to the cost of their delivery. This figure is even higher for especially remote locations.

The small size, lightweight, and fixed cost of the FNPP eliminate many such challenges.

- The small nuclear reactor can operate non-stop without the need for refuelling for three to five years, thereby considerably reducing the cost of electricity generation.

Que 62: A

Soil Health Card (SHC) Scheme was launched with the objective of issuing soil cards to farmers which carry crop-wise recommendations of nutrients and fertilizers required for the individual

farms. It intends to help farmers to improve productivity through the judicious use of inputs. All soil samples are tested in various soil testing labs across the country. Thereafter the experts analyze the strength and weaknesses (micro-nutrients deficiency) of the soil and suggest measures to deal with it. The result and suggestions are displayed on the cards.

SHC is a printed report that a farmer will be handed over for each of his holdings. It contains the status of his soil with respect to 12 parameters, namely N, P, K (Macro-nutrients); S (Secondary-nutrient); Zn, Fe, Cu, Mn, Bo (Micronutrients); and pH, EC, OC (Physical parameters).

It is made available once in a cycle of 3 years, which indicates the status of soil health of a farmer's holding for that particular period.

Gol provides a sum of Rs. 190 per soil sample to the state governments. This covers the cost of collection of the soil sample, its test, generation and distribution of soil health card to the farmer. There is no burden on the farmer to generate soil health cards.

Que 63: C

Registrar General and Census Commissioner of India is a permanent body under the Ministry of Home Affairs, for arranging, conducting and analyzing the results of the demographic surveys of India including the Census of India and Linguistic Survey of India. The position of Registrar is usually held by a civil servant holding the rank of Joint Secretary.

The responsibility of conducting the decennial Census rests with the Office of the Registrar General and Census Commissioner.

The Census Act was enacted in 1948 to provide for the scheme of conducting population census with duties and responsibilities of census officers. The Government of India decided in May 1949 to initiate steps for developing a systematic collection of statistics on the size of the population, its growth, etc., and established an organization in the Ministry of Home Affairs under Registrar General and ex-Officio Census Commissioner, India.

Que 64: D

Mica is a non-metallic mineral which is used in the electrical and electronic industries. It is produced in Jharkhand, Andhra Pradesh, Telangana and Rajasthan followed by Tamil Nadu, West Bengal and Madhya Pradesh. In Jharkhand high quality mica is obtained in a belt extending in lower Hazaribagh plateau. In Andhra Pradesh, Nellore district produces the best quality mica. In Rajasthan mica belt extends from Jaipur to Bhilwara and around Udaipur.

Manganese is an important raw material for smelting of iron ore and also used for manufacturing ferro alloys. Manganese deposits are found in almost all geological formations, however, it is mainly associated with Dharwar system. Odisha is the leading producer of Manganese. Other important producers of Manganese in India are Karnataka and Maharashtra. Telangana, Goa, and Jharkhand are other minor producers of manganese

Natural gas is a naturally occurring hydrocarbon gas mixture consisting primarily of methane. It is obtained alongwith oil in all the oil fields but exclusive reserves have been located along the eastern coast as well as (Tamil Nadu, Odisha and Andhra Pradesh), Tripura, Rajasthan and off-

shore wells in Gujarat and Maharashtra. It has been found in Jaisalmer and Barmer regions of Rajasthan.

Que 65: C

Industrial Regions and Districts

Major Industrial Regions (8)

1. Mumbai-Pune Region, 2. Hugli Region, 3. Bengaluru-Tamil Nadu Region, 4. Gujarat Region, 5. Chotanagpur Region, 6. Vishakhapatnam-Guntur Region, 7. Gurgaon-Delhi-Meerut Region, and 8. Kollam-Thiruvananthapuram Region.

Minor Industrial Regions (13)

1. Ambala-Amritsar, 2. Saharanpur-Muzaffarnagar-Bijnor, 3. Indore-Dewas-Ujjain, 4. Jaipur-Ajmer, 5. Kolhapur-South Kannada, 6. Northern Malabar, 7. Middle Malabar, 8. Adilabad-Nizamabad, 9. Allahabad-Varanasi-Mirzapur, 10. Bhojpur-Munger, 11. Durg-Raipur, 12. Bilaspur-Korba, and 13. Brahmaputra valley.

Que 66: A

In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year. These are Aus, Aman and Boro.

Que 67: A

Features of HELP:

- Uniform License: It will enable the contractor to explore conventional as well as unconventional oil and gas resources including CBM, shale gas/oil, tight gas and gas hydrates under a single license, instead of the present system of issuing separate licenses for each kind of hydrocarbons.
- Open Acreages: It gives the option to a hydrocarbon company to select the exploration blocks throughout the year without waiting for the formal bid round from the Government.
- Revenue Sharing Model: Present fiscal system of production sharing contract (PSC) is replaced by an easy to administer revenue sharing model. Thus statement 3 is not correct.
- Marketing and Pricing: This policy also provides for marketing freedom for crude oil and natural gas produced from these blocks. This is in tune with Government's policy of Minimum Government -Maximum Governance.
- A graded system of royalty rates have been introduced, in which royalty rates decrease from shallow water to deep-water and ultra-deep water. At the same time, royalty rate for on land areas have been kept intact so that revenues to the state governments are not affected. On the lines of NELP, cess and import duty will not be applicable on blocks awarded under the new policy.

Que 68: A

The North East is predominantly rural, with over 84% of the population living in the countryside, which is more than the national average of 68%.

- Per capita power consumption is 258 kWh, which is less than one-third of the national average (883 kWh).
- The NE States of the India account for nearly one-fourth of the country's forest cover, well above the national average.

The average literacy rate of the region is well above national average of 74.04. The states in region have following literacy rates:

- Arunachal Pradesh - 66.95
- Assam - 73.18

- Manipur - 79.85
- Mizoram - 91.58
- Meghalaya - 75.48
- Nagaland - 80.11
- Sikkim - 82.20
- Tripura - 87.75

Que 69: B

Pradhan Mantri Kisan Samman Nidhi is an initiative by the government of India in which all small and marginal farmers will get up to 6,000 per year as minimum income support.

6,000 per year will be paid to each eligible farmer in three instalments and will be deposited directly to their bank accounts

It falls under the aegis of Ministry of Agriculture and Farmers Welfare.

Que 70: A

It is estimated that India would need to spend \$4.5 trillion on infrastructure by 2030 to sustain its growth rate. The endeavour of the National Infrastructure Pipeline (NIP), is to make this happen in an efficient manner.

The central government and state governments would have an equal share of 39% each in the NIP. The private sector, on the other hand, would have 22% share which the government expects to increase to 30% by 2025.

National Infrastructure Pipeline will ensure that infrastructure projects are adequately prepared and launched.

Each Ministry/ Department would be responsible for the monitoring of projects so as to ensure their timely and within cost implementation.

It will help in stepping-up annual infrastructure investment to achieve the Gross Domestic Product (GDP) of \$5 trillion by 2024-25.

Que 71: D

The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development.

- The Network covers seven creative fields: Crafts and Folk Arts, Media Arts, Film, Design, Gastronomy, Literature and Music.
- As of November, 2019, there are five Indian cities in UNESCO Creative Cities Network (UCCN) as follows:
 - o Jaipur-Crafts and Folk Arts (2015).
 - o Varanasi-Creative city of Music (2015).
 - o Chennai-Creative city of Music (2017).
 - o Mumbai – Film (2019).
 - o Hyderabad – Gastronomy (2019).

Que 72: D

Dindigul lock and the Kandangi saree from Tamil Nadu were given the GI tag.

o The famous Dindigul locks are known throughout the world for their superior quality and durability, so much so that even the city is called Lock City.

o The abundance of iron in this region is the reason for the growth of the lock-making industry.

o The original Kandangi saree is manually made using a winding machine, loom, shuttle and bobbin. It is a team effort of the families who live in the town of Karaikudi and it forms part of their

livelihood. These sarees are characterized by the large contrast borders, and some of them are known to have borders covering as much as two-thirds of the saree.

Patola, the trademark saree of Gujarat, is considered to be very costly and worn only by royals or aristocrats.

o It is a double ikat woven sari, usually made from silk, made in Patan, Gujarat, India. Got GI in 2009.

Gamosa: Assam

o It is generally a white rectangular piece of cloth with primarily a red border on three sides and red woven motifs on the fourth (in addition to red, other colors are also used).

o Although cotton yarn is the most common material for making/weaving gamosas, there are special occasion ones made from Pat silk.

o There are efforts underway to have the Gamosa registered with the Geographical Indication.

Que 73: D

Giving a major boost to development of natural gas grid in North East India, the Cabinet Committee on Economic Affairs (CCEA), have approved Viability Gap Funding/ Capital Grant of 60% of the estimated cost of Rs. 9,265 crore for the project to Indradhanush Gas Grid Limited (IGGL).

- The North East Gas Grid project is being implemented by IGGL, a Joint Venture company of five CPSEs (GAIL, IOCL, ONGC, OIL and NRL). The total length of the pipeline is planned to be 1,656

km and will be built at estimated cost of Rs. 9,265 crore (Including interest during construction). It will cover eight states of the NorthEastern region i.e., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

The Ministry of Petroleum & Natural Gas will identify milestones for major activities for this project and link the same for releases of capital grant of the project.

- The project is being implemented under ambitious Urja Ganga Gas Pipeline Project.

Que 74: A

Inner Line Permit is a document that allows an Indian citizen to visit or stay in a state that is protected under the ILP system.

The ILP is obligatory for all those who reside outside the protected states.

Currently, the Inner Line Permit is operational in Arunachal Pradesh, Mizoram and Nagaland.

It can be issued for travel purposes solely.

An ILP is issued by the state government concerned.

Que 75: D

Mixed farming is growing crops and rearing livestock simultaneously.

Mixed cropping is growing two or more crops simultaneously on the same piece of land, for example, wheat gram, or wheat mustard, or groundnut sunflower. This reduces risk and gives some insurance against failure of one of the crops.

Que 76: B

SELF EXPLANATORY

Que 77: D

The Ministry of Tribal Affairs (MoTA) has added nine minor forest produce (MFP) items to its minimum support price (MSP) for MFP scheme. The total number of MFPs covered under the list is 49.

The nine new items are: Bakul (dried bark), Kutaj (dried bark), Noni/Aal (dried fruits), Sonapatha/Syonak pods, Chanothi seeds, Kalihari (dried tubers), Makoi (dried fruits), Apang plant and Sugandhrnantri roots/tubers.

About MSP for MFP scheme:

The MSP for MFP scheme was started by the Centre in 2013 to ensure fair and remunerative prices to MFP gatherers.

The scheme is designed as a social safety net for improvement of livelihood of MFP gatherers by providing them fair price for the MFPs they collect.

The scheme has been started with the objective of providing fair price to MFP gatherers, enhance their income level and ensure sustainable harvesting of MFPs. The MSP scheme seeks assurance of buying at a particular price, primary processing, storage, transportation etc while ensuring sustainability of the resource base.

Ministry of Tribal Affairs, Government of India is the Nodal Ministry for implementation of the scheme which will announce Minimum Support Price (MSP) for the selected MFPs with the technical support from TRIFED.

TRIFED will act as the Central Nodal Agency for implementation and monitoring of the scheme through State level implementing agencies.

State designated agencies will undertake procurement of notified MFPs directly from MFP gatherers (individual or collectives) at haats notified procurement centers at grass root level at prefixed Minimum Support Price and ensure full & timely on the spot payment to MFP gatherers.

Que 78: B

Kandla Port is situated on the Gulf of Kutch. It is the biggest port of India by volume of freight handled.

- Mormugoa port is the foremost iron ore exporting port.
- Panambur is the location of sea port called New Mangalore Port. It is an all-season port.
- Paradip port is an artificial & deep water port.
- Ennore Port is also known as Kamarajar Port Limited & is the only major port registered as a company.
- Jawaharlal Nehru port is previously known as Nhava Sheva Port & is the largest container port in India.
- Tuticorin or Thoothukudi Port is an artificial deep-sea dock & is officially known as VO Chidambaranar Port.
- The Union Cabinet has approved a proposal to set up a major port at Vadhavan near Dahanu in Maharashtra with a total cost of 65,545 crore. This will be 13th major port in India.

Que 79: B

The UN Refugee Agency UNHCR has announced a new global campaign urging people worldwide to cover the total distance travelled by refugees each year – 2 billion kilometers – by running, jogging or walking.

The “2 Billion Kilometers to Safety” campaign vies to encourage people to support refugees by championing individual acts of solidarity.

Que 80: A

All four options given here are same to same as given by UPSC 2019 paper

- Organophosphate pesticides such as acephate, malathion, profenofos, chlorpyrifos and quinalphos are used in the cultivation of fruits and vegetables.
- The study measured the levels of these pesticides in 659 samples of fresh fruit and vegetables collected during the agricultural season of 2018-2019.

Union Cabinet has approved *the Pesticide Management Bill 2020* to promote the use of organic pesticides in the country.

Key provisions:

1. The bill will empower farmers to get all the information regarding pesticides including their strengths and weaknesses and the risk and alternatives involved, as the data would be made available in open source, in a digital format and in all languages.
2. The bill will also include the provision of compensating the farmers in case of losses due to the use of spurious or low quality of pesticides.
3. The union government may form a central fund to take care of the compensation.
4. Any person who wants to import, manufacture, or export pesticides would have to register under the new bill and provide all details regarding any claims, expected performance, efficacy, safety, usage instructions, and infrastructure available to stock that pesticide. The information will also include details on the pesticide's potential effects on the environment.
5. The bill also plans to regulate pesticides-related advertisements to check misleading claims by industries and manufacturers.

India is the fourth-largest producer of pesticides in the world, with the market segmentation tilted mainly towards insecticides, with herbicides on the increase in the recent past. It is reported that eight states consume more than 70% of the pesticides used in India. Amongst the crops, paddy accounts for the maximum share of consumption (26-28%), followed by cotton (18-20%), notwithstanding all the hype around Bt technology.

There are 292 pesticides registered in the country, and it is estimated that there are around 104 pesticides that are continued to be produced/ used in India that have been banned in two or more countries in the world. The industry has grown to be an INR 20,000 crores business in India, with the top 3 companies having a market share of 57%.

Que 81: C

SELF EXPLANATORY

Que 82: D

Agricultural scientist M.S. Swaminathan will receive the first World Agriculture Prize instituted by the Indian Council of Food and Agriculture (ICFA).

A cheque \$ 100,000 presented to Prof. MS Swaminathan as a part of World Agriculture Prize.

Que 83: D

The Nongkrem dance festival is celebrated during Autumn at Smit, the cultural centre of the Khasi Hills.

The Syiem of Khyrim along with the high priest performs the Pemplang ceremony. He offers oblation to a Lei Shyllong; the god of Shyllong peak by sacrificing a cock. An important part of this

festival is Pemblang (sacrifice of goats). Then offerings are made to the ancestor and ancestress of the ruling clan to the first uncle to the deity of Shillong peak.

Que 84: A

SELF EXPLANATORY

Que 85: D

SELF EXPLANATORY

Que 86: D

More women are getting into farming in India, with the latest Agriculture Census showing a rise in the percentage of female farmers. The number of small and medium land holding and that of farmers and tillers too have increased in the country.

Uttar Pradesh is home to the largest number of people tilling land, followed by Bihar and Maharashtra, according to the 2015-16 Agriculture Census.

As much as 86.21% of India's cultivated farmland is held by small and marginal farmers with less than two hectares of land, while those with 10 hectares and more account for just 0.57%. The average size of agriculture landholding declined to 1.08 hectare in 2015-16 from 1.15 hectare in 2010-11.

The share of small and marginal farmers in total operational area — both cultivated and uncultivated areas— was 47.34%, up from 44.31% five years earlier. The individual, joint and institutional holdings have shown growth of 5.04%, 7.07% and 10.88%, respectively, over previous census, it said.

Uttar Pradesh had 23.82 million farmers and tillers in 2015-16, followed by Bihar at 16.41 million and Maharashtra with 14.71 million.

The average size of farm holding was the highest in Nagaland at 5.06 hectares and the lowest in Kerala at 0.18 hectare.

The percentage of female operational land holders increased from 12.79% in 2010-11 to 13.87% in 2015-16. The corresponding figures are 10.36% and 11.57% in operated area.

Agriculture Census in India is conducted at five-year intervals to collect data on structural aspects of farm holdings. It is carried in three phases: first on primary subjects like the numbers and area of operational holdings, followed by a detailed one based on samples from 20% of villages in each tehsil on land use, irrigation status, tenancy particulars, and finally on pattern of input use.

Que 87: D

In India, communities like Gurjjars, Gaddis, Bakarwals, Bhotias practice transhumance.

Que 88: B

Jal Marg Vikas project on NW 1 is aimed at augmenting the navigational capacity on Varanasi to Haldia stretch. To make commercial navigation feasible on NW 1.

Project involves constructing/setting up of multi-modal terminals at 3 places – Varanasi, Sahibganj and Haldia.

It is being implemented with financial and technical support of world bank.

Que 89: B

Baiga tribes a PVTG is mainly concentrated in Madla and Balaghat district of MP. They are also found in Up, Chattishgarh and Jharkhand.

They used to live a semi-nomadic life and practice Dahiya cultivation – a type of slash and burn agriculture.

They become the first tribal community in India to get the right to habitat under FRA.

Que 90: A

Recently International Commission on Irrigation and drainage has recognised Telangan sadarmatt anicut and Pedda Cheruvu in ICID register of Heritage Irrigation structure.

Que 91: B

The National Capital Region Planning Board (NCRPB), in order to enhance the connectivity within the NCR, has proposed to connect urban, industrial (SEZs/industrial parks), regional and sub-regional centers through a fast rail based Regional Rapid Transit System (RRTS). The objective of this system is to reduce dependence of commuters on road based transportation.

The NCRPB conducted a study on Integrated Transportation Plan for NCR projecting figures for 2032 and has identified eight rail based rapid transit corridors to enhance the efficacy of the transportation system in the NCR. In addition to the rail system there will also be provisions made for facilities including road network enhancements

Que 92: A

Surrounded by blue rolling hills and topographically cut off from the rest of the populated areas of the region, Ziro Valley presents an example of how co-existence of man and nature has been perfected over the centuries by the Apatani civilization. The valley, inhabited by the Apatani tribe, lies tucked in the lower ranges of the eastern Himalayas in the state of Arunachal Pradesh in north-east India.

The Apatanis, one of the major ethnic groups of eastern Himalayas, have a distinct civilization with systematic land use practices and rich traditional ecological knowledge of natural resources management and conservation, acquired over the centuries through informal experimentation. The tribe is known for their colorful culture with various festivals, intricate handloom designs, skills in cane and bamboo crafts, and vibrant traditional village councils called bulyañ.

The hallmark of the valley is judicious utilization of limited land area. The relatively flat land in the valley is used for wet-rice cultivation where fish also is reared. This systematic land-use pattern ensures high level of biodiversity in the area and efficient conservation of crucial watersheds ensuring perennial streams flowing into the valley to meet the needs of the people.

The community has evolved a unique skill of rice-fish cultivation where along with paddy, fish is also reared on the fields. This is further supplemented with millet (*Eleusine coracana*) reared on elevated partition bunds between the rice plots. The agro-ecosystems are nourished by nutrient wash-out from the surrounding hill slopes. Nutrient loss with crop harvest is replaced by recycling crop residues and use of organic wastes of the villages so that soil fertility is sustained year after year.

Que 93: A

Mission Purvodaya:

- This mission was launched in 2020 for the development of the eastern part of the country through the establishment of an integrated steel hub in Kolkata, West Bengal.
- The focus will be on eastern states of India (Odisha, Jharkhand, Chhattisgarh, West Bengal) and the northern part of Andhra Pradesh which collectively holds 80% of the country's iron ore, 100% of coking coal and a significant portion of chromite, bauxite and dolomite reserves.

The Integrated Steel Hub would focus on 3 key elements:

- Capacity addition through easing the setup of Greenfield steel plants.
- Development of steel clusters near integrated steel plants as well as demand centers.
- Transformation of logistics and utility infrastructure which would change the socio-economic landscape in the East.
- The objective of this hub would be to enable swift capacity addition and improve the overall competitiveness of steel producers both in terms of cost and quality.

Que 94: A

The Cabinet Committee on Economic Affairs has approved a "Dairy Processing & Infrastructure Development Fund" (DIDF).

About the Project

- Building an efficient milk procurement system by setting up of chilling infrastructure & installation of electronic milk adulteration testing equipment,
- Creation/modernization/expansion of processing infrastructure and manufacturing facilities for Value Added Products for the Milk Unions/ Milk Producer Companies.

Management of DIDF:

- The project will be implemented by National Dairy Development Board (NDDB) and National Dairy Development Cooperation (NCDC) directly through the End Borrowers such as Milk Unions, State Dairy Federations, Multi-state Milk Cooperatives, Milk Producer Companies and NDDB subsidiaries meeting the eligibility criteria under the project.
- An Implementation and Monitoring Cell (IMC) located at NDDB, Anand, will manage the implementation and monitoring of day-to-day project activities.
- The respective State Government will be the guarantor of loan repayment.
- Also for the project sanctioned if the end user is not able to contribute its share; State Government will contribute the same.

Que 95: D

A 'fruit train', said to be the first of its kind in the country, was recently flagged off from Tadipatri Railway Station in Andhra Pradesh.

The fruit train was carrying a load of 980 metric tonnes of locally grown bananas to the Jawaharlal Nehru Port in Mumbai, from where the consignment will be exported to Iran.

This is the first time in India that an entire train is being sent to the gateway port (JNPT) for export.

This helps save both time and fuel as 150 trucks would have been required to send a consignment of this size by road to JNPT, which is over 900 km away, before the temperature-controlled containers are loaded on ships.

Que 96: A

One of the negative social consequence of migration is that it causes anonymity, which creates social vacuum and sense of dejection among individual.

Que 97: D

Class notes – sugar industry topic

Que 98: D

The Blue Revolution scheme has the following components:

1. National Fisheries Development Board (NFDB) and its activities
2. Development of Inland Fisheries and Aquaculture
3. Development of Marine Fisheries, Infrastructure and Post-Harvest Operations. Harbor are part of this program.
4. Strengthening of Database & Geographical Information System of the Fisheries Sector
5. Institutional Arrangement for Fisheries Sector
6. Monitoring, Control and Surveillance (MCS) and other need-based Interventions
7. National Scheme of Welfare of Fishermen

There is no mention of subsidies for fishes and its products to fishermen.

Class notes – blue revolution topic

Que 99: D

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Que 100: D

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