

Q.1) With respect to the agriculture, consider the following statements:

1. Intensive agriculture: This is a widely-practiced farming technique can be seen all over India. The farmer and/or his family grow grains for themselves or for sale at the local market.
2. Subsistence farming: This farming practice can be seen in densely populated areas in India. It is an attempt to maximize the output of the land, through the use of every possible effort.
3. Commercial agriculture: This is the modern type of farming that can be seen largely in the developed world and in some parts of India. It relies largely on machinery as opposed to a human labour force and raises one crop per year.
4. Extensive agriculture: The goal of extensive agriculture is a high yield in small farms, so that produce can be exported to other countries or areas for profit.

Which of the above statements is/are correct?

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

Q.1) Solution (d)

<https://aquaponicsinindia.com/types-of-agriculture-in-india/>

Q.2) Consider the following statements:

1. Agriculture, specifically farming, remains a hazardous industry, and farmers worldwide remain at high risk of work-related injuries.
2. The International Labour Organization considers agriculture "one of the most hazardous of all economic sectors".

Which of the above statements regarding agricultural safety is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) None of the above

Q.2) Solution (c)

Farming, remains a hazardous industry, and farmers worldwide remain at high risk of work-related injuries, lung disease, noise-induced hearing loss, skin diseases, as well as certain cancers related to chemical use and prolonged sun exposure. On industrialized farms, injuries frequently involve the use of agricultural machinery, and a common cause of fatal agricultural injuries in developed countries is tractor rollovers. Pesticides and other chemicals used in farming can also be hazardous to worker health, and workers exposed to pesticides may experience illness or have children with birth defects. As an industry in which families commonly share in work and live on the farm itself, entire families can be at risk for injuries, illness, and death. Ages 0–6 may be an especially vulnerable population in agriculture; common causes of fatal injuries among young farm workers include drowning, machinery and motor accidents, including with all-terrain vehicles.

The International Labour Organization considers agriculture "one of the most hazardous of all economic sectors".

It estimates that the annual work-related death toll among agricultural employees is at least 170,000, twice the average rate of other jobs. In addition, incidences of death, injury and illness related to agricultural activities often go unreported. The organization has developed the Safety and Health in Agriculture Convention, 2001, which covers the range of risks in the agriculture occupation, the prevention of these risks and the role that individuals and organizations engaged in agriculture should play

Q.3) Consider the following statements:

1. Tillage is the practice of breaking up the soil with tools such as the plow or harrow to prepare for planting, for nutrient incorporation, or for pest control.
2. Integrated pest management attempts to use chemical, biological, mechanical and cultural methods to keep pest populations below the number which would cause economic loss, and recommends pesticides as a last resort.
3. Nutrient management includes both the source of nutrient inputs for crop and livestock production, and the method of utilization of manure produced by livestock.

Which of the above statements are correct?

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

d) All of the above are correct.

Q.3) Solution (d)

Tillage is the practice of breaking up the soil with tools such as the plow or harrow to prepare for planting, for nutrient incorporation, or for pest control. Tillage varies in intensity from conventional to no-till. It may improve productivity by warming the soil, incorporating fertilizer and controlling weeds, but also renders soil more prone to erosion, triggers the decomposition of organic matter releasing CO₂, and reduces the abundance and diversity of soil organisms.

Pest control includes the management of weeds, insects, mites, and diseases. Chemical (pesticides), biological (biocontrol), mechanical (tillage), and cultural practices are used. Cultural practices include crop rotation, culling, cover crops, intercropping, composting, avoidance, and resistance. Integrated pest management attempts to use all of these methods to keep pest populations below the number which would cause economic loss, and recommends pesticides as a last resort.

Nutrient management includes both the source of nutrient inputs for crop and livestock production, and the method of utilization of manure produced by livestock. Nutrient inputs can be chemical inorganic fertilizers, manure, green manure, compost and minerals. Crop nutrient use may also be managed using cultural techniques such as crop rotation or a fallow period. Manure is used either by holding livestock where the feed crop is growing, such as in managed intensive rotational grazing, or by spreading either dry or liquid formulations of manure on cropland or pastures.

Q.4) Consider the following statements related to push – pull agricultural pest management:

1. Push–pull technology is a strategy for controlling agricultural pests by using repellent "push" plants and trap "pull" plants.
2. The approach relies on a combination of companion crops to be planted around and among maize or sorghum.
3. The "push" in the intercropping scheme is provided by the plants that emit chemicals which repel stemborer moths and drive them away from the main crop (maize or sorghum).

Which of the above statements are correct?

- a) Only 1 and 2

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

Q.4) Solution (d)

THE PULL

The approach relies on a combination of companion crops to be planted around and among maize or sorghum. Both domestic and wild grasses can help to protect the crops by attracting and trapping the stemborers. The grasses are planted in the border around the maize and sorghum fields where invading adult moths become attracted to chemicals emitted by the grasses themselves. Instead of landing on the maize or sorghum plants, the insects head for what appears to be a tastier meal. These grasses provide the "pull" in the "push-pull" strategy.

THE PUSH

The "push" in the intercropping scheme is provided by the plants that emit chemicals (kairomones) which repel stemborer moths and drive them away from the main crop (maize or sorghum). The best candidates discovered so far with the repellent properties are species of leguminous genus *Desmodium*. *Desmodium* is planted in between the rows of maize or sorghum. Being a low-growing plant, it does not interfere with the crops' growth and, furthermore, has the advantage of maintaining soil stability, improving soil fertility through enhanced soil organic matter content and nitrogen fixation.

HOW PUSH PULL WORKS?

Push-pull technology involves use of behaviour-modifying stimuli to manipulate the distribution and abundance of stemborers and beneficial insects for management of stemborer pests. It is based on in-depth understanding of chemical ecology, agro-biodiversity, plant-plant and insect-plant interactions, and involves intercropping a cereal crop with a repellent intercrop such as *Desmodium uncinatum* (silverleaf) (push), with an attractive trap plant such as Napier grass (pull) planted as a border crop around this intercrop. Gravid stemborer females are repelled from the main crop and are simultaneously attracted to the trap crop.

https://en.wikipedia.org/wiki/Push%26amp%93pull_agricultural_pest_management

Q.5) Consider the following statements:

1. Payments for Ecosystem Services (PES) are incentives offered to farmers or landowners in exchange for managing their land to provide some sort of ecological service.
2. Ecosystem services have no standardized definition but might broadly be called "the benefits of nature to households, communities, and economies" or, more simply, "the good things nature does".
3. Twenty-four specific ecosystem services were identified and assessed by the Millennium Ecosystem Assessment, a 2005 UN-sponsored report designed to assess the state of the world's ecosystems.
4. Climate change mitigation, watershed services and biodiversity conservation are known as the big three Ecosystem services.

Which of the above statements are correct?

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

Q.5) Solution (d)

Payments for Ecosystem Services (PES), also known as payments for environmental services (or benefits), are incentives offered to farmers or landowners in exchange for managing their land to provide some sort of ecological service. They have been defined as "a transparent system for the additional provision of environmental services through conditional payments to voluntary providers". These programmes promote the conservation of natural resources in the marketplace.

Ecosystem services have no standardized definition but might broadly be called "the benefits of nature to households, communities, and economies" or, more simply, "the good things nature does". Twenty-four specific ecosystem services were identified and assessed by the Millennium Ecosystem Assessment, a 2005 UN-sponsored report designed to assess the state of the world's ecosystems. The report defined the broad categories of ecosystem services as food production (in the form of crops, livestock, capture fisheries, aquaculture, and wild foods), fiber (in the form of timber, cotton, hemp, and silk), genetic resources (biochemicals, natural medicines, and pharmaceuticals), fresh water, air quality regulation, climate regulation, water regulation, erosion regulation, water purification and waste treatment, disease regulation, pest regulation,

pollination, natural hazard regulation, and cultural services (including spiritual, religious, and aesthetic values, recreation and ecotourism). Notably, however, there is a "big three" among these 24 services which are currently receiving the most money and interest worldwide. These are climate change mitigation, watershed services and biodiversity conservation, and demand for these services in particular is predicted to continue to grow as time goes on.

Q.6) Consider the following statements:

1. Aeroponics is the process of growing plants in an air or mist environment without the use of soil or an aggregate medium (known as geponics).
2. Unlike hydroponics, which uses a liquid nutrient solution as growing medium and essential minerals to sustain plant growth; or aquaponics which uses water and fish waste, aeroponics is conducted without a growing medium.
3. It is sometimes considered a type of hydroponics, since water is used in aeroponics to transmit nutrients.

Which of the above statements are correct?

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

Q.6) Solution (d)

The basic principle of aeroponic growing is to grow plants suspended in a closed or semi-closed environment by spraying the plant's dangling roots and lower stem with an atomized or sprayed, nutrient – rich water solution.

Ideally, the environment is kept free from pests and disease so that the plants may grow healthier and more quickly than plants grown in a medium. However, since most aeroponic environments are not perfectly closed off to the outside, pests and disease may still cause a threat.

Due to the sensitivity of root systems, aeroponics is often combined with conventional hydroponics, which is used as an emergency "crop saver" – backup nutrition and water supply – if the aeroponic apparatus fails.

<https://en.wikipedia.org/wiki/Aeroponics>

Q.7) Consider the following statements regarding Agro-ecology:

1. Agro ecology is the study of ecological processes applied to agricultural production systems.
2. The field of agro-ecology is associated with extensive farming only.
3. Agro ecology is not defined by certain management practices, such as the use of natural enemies in place of insecticides, or polyculture in place of monoculture.

Which of the above statements are correct?

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

Q.7) Solution (c)

Agro-ecology is the study of ecological processes applied to agricultural production systems. Bringing ecological principles to bear in agro ecosystems can suggest novel management approaches that would not otherwise be considered.

The term is often used imprecisely and may refer to "a science, a movement, [or] a practice". Agro ecologists study a variety of agro ecosystems. The field of agro ecology is not associated with any one particular method of farming, whether it be organic, integrated, or conventional, intensive or extensive. However, it has much more in common with organic and integrated farming.

Agro ecologists do not unanimously oppose technology or inputs in agriculture but instead assess how, when, and if technology can be used in conjunction with natural, social and human assets.

Agro ecology proposes a context- or site-specific manner of studying agro ecosystems, and as such, it recognizes that there is no universal formula or recipe for the success and maximum well-being of an agro ecosystem.

Thus, agro ecology is not defined by certain management practices, such as the use of natural enemies in place of insecticides, or polyculture in place of monoculture.

Q.8) Consider the following statements:

1. Corporate farming is the practice of large-scale agriculture on farms owned or greatly influenced by large companies.
2. Farming contracts are agreements between a farmer and a buyer that stipulates what the farmer will grow and how much they will grow usually in return for guaranteed purchase of the product or financial support in purchase of inputs.

Which of the above statements are correct?

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

Q.8) Solution (c)

Corporate farming is the practice of large-scale Agriculture on farms owned or greatly influenced by large companies. This includes corporate ownership of farms and selling of agricultural products, as well as the roles of these companies in influencing agricultural education, research, and public policy through funding initiatives and lobbying efforts.

Contract Farming

Farming contracts are agreements between a farmer and a buyer that stipulates what the farmer will grow and how much they will grow usually in return for guaranteed purchase of the product or financial support in purchase of inputs (e.g. feed for livestock growers). In most instances of contract farming, the farm is family owned while the buyer is a larger corporation

Q.9) Consider the following statements:

1. 'Pharming' refers to the use of genetic engineering to insert genes that code for useful pharmaceuticals into host animals or plants that would otherwise not express those genes, thus creating a genetically modified organism (GMO).
2. Pharming is also known as molecular farming or bio-pharming.
3. The products of pharming are recombinant proteins or their metabolic products.

Which of the above statements are correct?

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

Q.9) Solution (c)

All the statements are self Explanatory.

A biopharmaceutical, also known as a biologic (al) medical product, or biologic, is any pharmaceutical drug product manufactured in, extracted from, or semi-synthesized from biological sources.

Different from totally synthesized pharmaceuticals, they include vaccines, blood, blood components, allergenics, somatic cells, gene-therapies, tissues, recombinant-therapeutic protein, and living cells used in cell therapy.

<https://en.wikipedia.org/wiki/Biopharmaceutical>

[https://en.wikipedia.org/wiki/Pharming_\(genetics\)](https://en.wikipedia.org/wiki/Pharming_(genetics))

Q.10) Recently, Journal of Food Science study detected zearalenone in wheat, rice, corn and oats from markets in Uttar Pradesh. The study, by researchers from Lucknow's Indian Institute of Toxicology Research (IITR), found the substance in 70 of the 117 samples tested. Which of the following statements regarding Zearalenone are correct?

1. Zearalenone is a fungal toxin infesting cereals such as wheat, maize and barley.
2. It attacks crops while they are growing, but can also develop when cereals are stored without being dried fully.

3. Zearalenone behaves like estrogen, the female sex hormone, and could cause endocrine disturbances in humans. Its nasty effects in animals, such as pigs, are documented.

Which of the above statements are correct?

- a) Only 1 and 2
- b) Only 2 and 3
- c) Both 1 and 3
- d) All of the Above.

Q.10) Solution (d)

The statements are self-explanatory.

Kindly see the following article from The Hindu published on 26th January 2019.

<https://www.thehindu.com/sci-tech/science/the-lowdown-on-zearalenone-in-cereals/article26100813.ece>

Q.11) Consider the following statements regarding Zero Budget Natural Farming:

1. 'Zero budget' farming promises to end a reliance on loans and drastically cut production costs, ending the debt cycle for desperate farmers.
2. The phrase 'Zero Budget' means without using any credit, and without spending any money on purchased inputs.

Which of the above statements is/are correct?

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

Q.11) Solution (c)

Statements are self-explanatory.

Zero Budget Natural Farming (ZBNF) is a set of farming methods as well as a grassroots peasant movement, which has spread to various states in India. It has attained wide success in southern India, especially the southern Indian state of Karnataka where it first evolved.

<http://www.fao.org/agroecology/detail/en/c/443712/>

<https://www.thebetterindia.com/55881/zero-budget-natural-farming-subash-palekar/>

<https://www.unenvironment.org/news-and-stories/press-release/andhra-pradesh-become-indias-first-zero-budget-natural-farming-state>

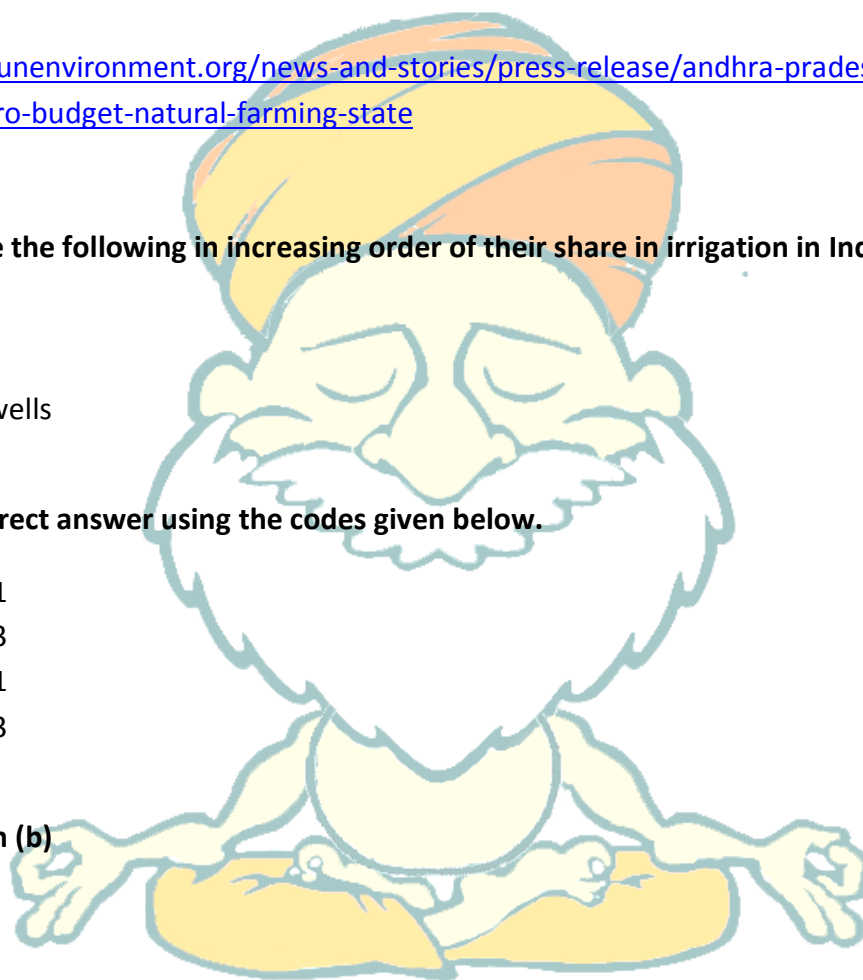
Q.12) Arrange the following in increasing order of their share in irrigation in India.

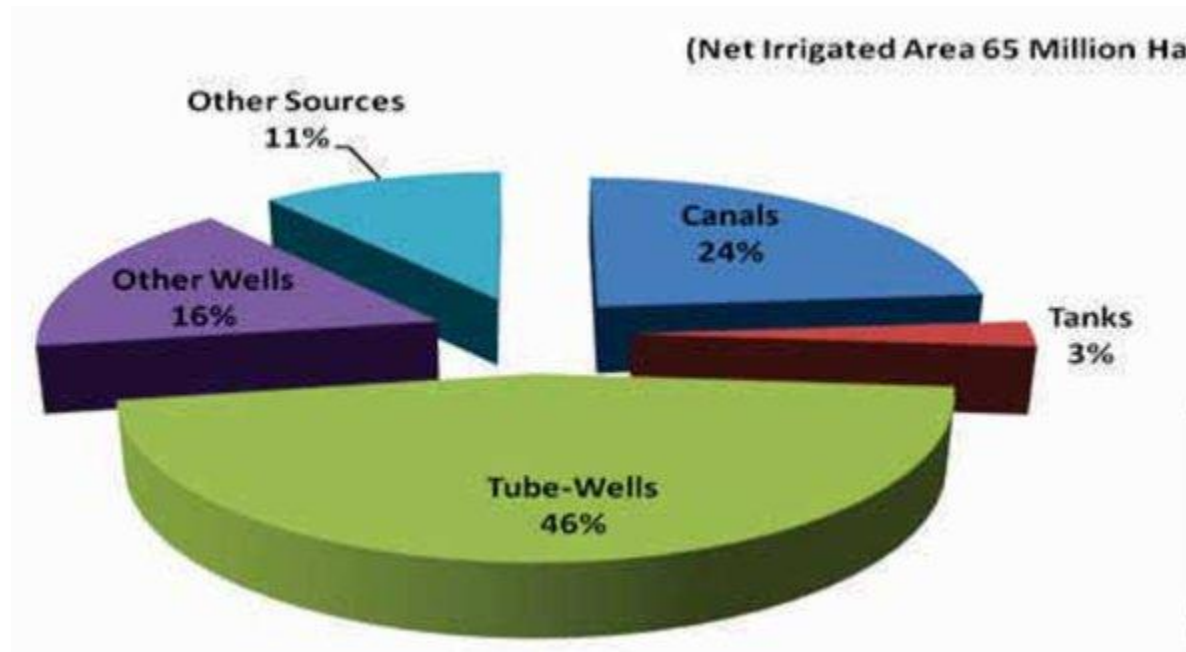
1. Canals
2. Wells
3. Tube wells
4. Tanks

Select the correct answer using the codes given below.

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

Q.12) Solution (b)





Since 1950-51, the government had given considerable importance to the development of command area under canals. In 1950-51, the Canal irrigated area was 8.3 million hectares and it currently stands at 17 million hectares. Despite that, the relative importance of Canals has come down from 40% in 1951 to 26% in 2010-11. On the other hand, the well (16%) and tube well (46%) accounted for 29% total irrigated area and now they share 64% of the total irrigated area.

This implies that **“despite of heavy public expenditure on canals, our governments have not been able to reduce the groundwater depletion”** done by the remarkable progress of the tube wells in last many decades. The key reason is widening gap between irrigation potential created and actually utilized.

India accounts for around 4% of world's renewable water resources. The average annual precipitation in India is around 4000 BCM (Billion Cubic Meter). Of this, around half (1869 BCM) water runs off from rivers to oceans. What is left from that only 690 BCM is utilizable surface water. This along with 430 BCM groundwater makes India's total annual utilizable water resources to be close to 1120 BCM.

Q.13) Which of the following best defines Mridaparikshak?

- The device which measures the water table in agriculture fields.

- b) Mini lab for soil testing and fertilizer recommendation.
- c) Indigenous Ecological niche modelling (ENM) system.
- d) Indigenous geophysical survey technology.

Q.13) Solution (b)

ICAR, Indian Institute of Soil Science, Bhopal, a research institute under the Natural Resource Management (NRM) Division of Indian Council of Agricultural Research (ICAR), has developed '*Mridaparikshak*', a **MINILAB that can determine soil health**.

The Features of MRIDAPARIKSHAK include:

- Mridaparikshak is a digital mobile quantitative minilab/soil test kit to provide soil testing service at farmers' doorsteps.
- Mridaparikshak determines all the important soil parameters i.e. soil pH, EC, organic carbon, available nitrogen, phosphorus, potassium, Sulphur and micronutrients like zinc, boron and iron.
- It also provides crop and soil specific fertilizer recommendations directly to farmer's mobile through SMS.
- It is highly compatible with soil health card.
- Mridaparikshak comes with soil sampling tools, GPS, balance, shaker, hot plate, and a Smart Soil Pro, an instrument for determining the soil parameters and displaying of fertilizer nutrient recommendations.
- It can be operated by young educated farmers/rural youths (11-12 Pass) with short training.

Extra

- Forecasting studies of rice yields using **DSSAT (Decision Support System for Agrotechnology Transfer)** rice model predicted that, all states in the eastern region are likely to experience reduced yields of below or equal to 10% during mid-century climate change scenarios except Bihar.
- The Decision Support System for Agrotechnology Transfer (DSSAT) is a **set of computer programs for simulating agricultural crop growth**. It has been used in over 100 countries by agronomists for evaluating farming methods. One application has been

assessing the possible impacts on agriculture of climate change and testing adaptation methods.

Q.14) Consider the following statements regarding location of industries in India:

1. India's first Defence Industrial Park is coming up at Palakkad district of Kerala
2. The Government has decided to establish two Defence Industrial Production Corridors one in Tamil Nadu and the other in Uttar Pradesh.

Which of the above statements is/are correct?

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

Q.14) Solution (c)

Please see the PIB link of 31st December 2018.

- 1) One proposal was from Government of Kerala to establish Defence Park at Pallakad (Kerala). The project is located at KINFRA Defence Park, Pallakad (Kerala).
- 2) Another project proposal was received from Gujarat Industrial Development Corporation for establishment of Defence Park at Sanand.

DIPP does not have any specific policy or scheme for assistance to promote or establish Defence Parks in States and there is no proposal at present to implement any specific scheme for providing assistance to promote or establish Defence Parks. However, consequent to the announcement in the Budget Speech (2018-19) by Finance Minister for setting up of two Defence Industrial Production Corridors in the country, the Government has decided to establish two such corridors, one in Tamil Nadu and the other in Uttar Pradesh.

<http://pib.nic.in/PressReleseDetail.aspx?PRID=1557862>

Please see the location of defence industrial corridors by visiting this link:

<http://www.defproac.com/wp-content/uploads/2018/08/1-2-1024x426.jpg>

Rest of the Info is taken from the following Links:

<https://www.moneycontrol.com/news/india/what-is-defence-industrial-production-corridor-2498215.html>

<https://economictimes.indiatimes.com/news/defence/niramala-sitharaman-inaugurates-tamil-nadu-defence-industrial-corridor/articleshow/67609598.cms>

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=181804>

Q.15) Consider the following statements regarding the Footloose Industries:

1. Footloose industry is a general term for an industry that can be placed and located at any location without effect from factors of production such as resources, land, labor, and capital.
2. These industries often have spatially fixed costs, which mean that the costs of the products change with the change of place.
3. Footloose industries can also refer to the processing of products that are neither weight-gaining, nor weight-losing, and face significant transportation costs.

Which of the above statements are correct?

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

Q.15) Solution (c)

Footloose industry is a general term for an industry that can be placed and located at any location without effect from factors of production such as resources, land, labour, and capital.

These industries often have spatially fixed costs, which means that the costs of the products do not change despite where the product is assembled. Diamonds, computer chips, and mobile manufacturing are some examples of footloose industries. These are generally non-polluting industries. Non-footloose industries generally require raw material availability within a time limit to make products. Sugar industry, jute industry and tea industry are the examples of non-footloose industries.

Footloose industries can also refer to the processing of products that are neither weight-gaining, nor weight-losing, and face significant transportation costs. An example of a footloose processing industry is honey. The weight of the raw honey and wax is the same as the finishing product. So, whether the honey is processed near the source of the raw materials or at the location of the final product demand, the transportation costs are the same.

Q.16) Which of the following scheme was launched by Ministry of Tourism to develop Theme based tourist circuits?

- a) Bharat Bhraman Scheme
- b) Swadesh Darshan Scheme
- c) Incredible India Intersections
- d) HRIDAY

Q.16) Solution (b)

Ministry of Tourism (MoT) launched the Swadesh Darshan Scheme (Central Sector Scheme)– for integrated development of theme based tourist circuits in the country in 2014-15. This scheme is envisioned to synergise with other Government of India schemes like Swachh Bharat Abhiyan, Skill India, Make in India etc. with the idea of positioning the tourism sector as a major engine for job creation, driving force for economic growth, building synergy with various sectors to enable tourism to realise its potential.

<https://economictimes.indiatimes.com/news/politics-and-nation/tourism-ministry-sanctions-projects-worth-rs-190-46-cr-in-3-states/articleshow/67498033.cms>

Q.17) Consider the following statements regarding the Tourism Industry in India:

1. Araku in Andhra Pradesh hosts international hot air balloon festival and is all set to become an eco-tourism destination.
2. As per the latest World Tourism and Travel Council report, India was ranked third, behind China and the US, in revenue generated by the sector.
3. The ministry of Tourism has evolved tremendously over the past few years and is now focusing on conveying the message of Indian philosophy to the world through six elements divided into Yoga, Ayurveda, Wildlife, Cuisine, Luxury and Buddha.

Which of the following statements is/are correct?

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

Q.17) Solution (d)

Self-explanatory.

This Question has been framed from multiple sources to cover the latest developments in Indian Tourism Industry. Students are requested to give at least one reading to the following links.

<https://economictimes.indiatimes.com/news/economy/infrastructure/7-islands-in-andamans-lakshadweep-identified-for-seaplane-operations/articleshow/68067455.cms>

<https://economictimes.indiatimes.com/magazines/panache/flying-in-a-hot-air-balloon-glamping-coffee-trails-araku-all-set-to-become-indias-eco-tourism-destination/articleshow/67683957.cms>

<https://economictimes.indiatimes.com/news/elections/lok-sabha/india/election-tourism-is-here-as-foreigners-get-to-experience-indias-biggest-festival-of-democracy/articleshow/68546075.cms>

<http://bwhotelier.businessworld.in/article/Incredible-Achievements-of-India-Tourism/26-03-2019-168467/>

<https://economictimes.indiatimes.com/industry/services/travel/the-big-draw-indian-tourism-in-numbers/articleshow/67002754.cms?from=mdr>

Q.18) National Electronic Policy 2019, passed by the Union Cabinet, can provide an impetus to Make in India (MII) and its efforts to become a global hub for Electronic System Design and Manufacturing (ESDM), apart from making electronics sector more competitive. Which of the following statements regarding NEP are correct?

1. The new policy targets \$400 billion turnover by 2025 from domestic manufacturing, setting up cluster for the entire value chain and employing over 1 crore people directly or otherwise to achieve a growth rate of 32 per cent.
2. The policy aims to make the country as a hub for electronic manufacturing for exports.
3. The policy entails creating a Sovereign Patent Fund (SPF) to promote the development.

Which of the following statements are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the Above.

Q.18) Solution (d)

National Policy on Electronics 2019 (NPE 2019)

Union Cabinet today gave its approval to the National Policy on Electronics 2019 (NPE 2019), proposed by the Ministry of Electronics and Information Technology (MeitY). The Policy envisions positioning India as a global hub for Electronics System Design and Manufacturing - (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.

Salient Features of NPE 2019

- Create eco-system for globally competitive ESDM sector: Promoting domestic manufacturing and export in the entire value-chain of ESDM.
- Provide incentives and support for manufacturing of core electronic components.
- Provide special package of incentives for mega projects which are extremely high-tech and entail huge investments, such as semiconductor facilities display fabrication, etc.
- Formulate suitable schemes and incentive mechanisms to encourage new units and expansion of existing units.
- Promote Industry-led R&D and innovation in all sub-sectors of electronics, including grass root level innovations and early stage Start-ups in emerging technology areas such as 5G, IoT/ Sensors, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices, etc.
- Provide incentives and support for significantly enhancing availability of skilled manpower, including re-skilling.

- Special thrust on Fabless Chip Design Industry, Medical Electronic Devices Industry, Automotive Electronics Industry and Power Electronics for Mobility and Strategic Electronics Industry.
- Create Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs in ESDM sector.
- Promote trusted electronics value chain initiatives to improve national cyber security profile.

Implementation strategy: The Policy will lead to the formulation of several schemes, initiatives, projects and measures for the development of ESDM sector in the country as per the roadmap envisaged therein.

Targets: Promote domestic manufacturing and export in the entire value-chain of ESDM for economic development to achieve a turnover of USD 400 billion (approximately INR 26,00,000 crore) by 2025. This will include targeted production of 1.0 billion (100 crore) mobile handsets by 2025, valued at USD 190 billion (approximately INR 13,00,000 crore), including 600 million (60 crore) mobile handsets valued at USD 110 billion (approximately INR 7,00,000 crore) for export.

<https://tech.economictimes.indiatimes.com/news/corporate/government-announces-new-electronic-policy-to-promote-domestic-manufacturing/68070523>

<https://www.thehindubusinessline.com/info-tech/national-electronic-policy-2019-to-boost-manufacturing-drive-exports/article26378362.ece>

Q.19) In order to provide an impetus to agricultural exports, the Government has come out with a comprehensive “Agriculture Export Policy” aimed at doubling the agricultural exports and integrating Indian farmers and agricultural products with the global value chains.

Consider the following statements regarding Agriculture Export Policy:

1. The Agriculture Export Policy has the vision: “Harness export potential of Indian agriculture, through suitable policy instruments, to make India global power in agriculture and raise farmers’ income.”
2. The recommendations in the Agriculture Export Policy have been organized in two categories – Strategic and Operational.

3. One of the Main Objectives of the Agriculture Export Policy is to double the farmer's income and agricultural production by 2030.

Which of the following statements are correct?

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

Q.19) Solution (a)

The Indian government on 6 December approved the country's first Agriculture Export Policy with an aim to increase agricultural export to \$60 billion by 2022 as well as double farmers' income.

The Government has come out with a policy to double farmers' income by 2022. Exports of agricultural products would play a pivotal role in achieving this goal. In order to provide an impetus to agricultural exports, the Government has come out with a comprehensive "Agriculture Export Policy" aimed at doubling the agricultural exports and integrating Indian farmers and agricultural products with the global value chains. The Agriculture Export Policy has the following vision:

"Harness export potential of Indian agriculture, through suitable policy instruments, to make India global power in agriculture and raise farmers' income."

Objectives:

Objectives of the Agriculture Export Policy are as under:

- To double agricultural exports from present ~US\$ 30+ Billion to ~US\$ 60+ Billion by 2022 and reach US\$ 100 Billion in the next few years thereafter, with a stable trade policy regime.
- To diversify our export basket, destinations and boost high value and value added agricultural exports including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.

- To provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phyto-sanitary issues.
- To strive to double India's share in world agri exports by integrating with global value chain at the earliest.
- Enable farmers to get benefit of export opportunities in overseas market.

Please see the PIB link below:

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=186182>

Q.20) Consider the following statements regarding Van Dhan Scheme for tribal agro products:

1. This first model Van Dhan Vikas Kendra is in Bijapur.
2. Under Van Dhan, 10 Self Help Groups of 30 Tribal gatherers is constituted and they are then trained and provided with working capital to add value to the products, which they collect from the jungle.
3. Working under the leadership of Collector/D.M, these groups can then market their products not only within the States but also outside the States.

Which of the following statements is/are correct?

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

Q.20) Solution (d)

The statements are self explanatory.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=178965>

This first model Van Dhan Vikas Kendra is in Bijapur. This Kendra will have processing facility for Tamarind brick making, Mahua flower storage facility and chironjee cleaning and packaging.

Extra Info:

Three stage value additions would be the corner stone for enhancing incomes of the tribals under the scheme. **The grass root level procurement is proposed to be undertaken through Self Help Groups associated with implementing agencies.** Convergence and Networking with other Govt. departments/scheme shall be undertaken to utilise the services of existing SHGs like Ajeevika, etc. These SHGs shall be appropriately trained on sustainable harvesting/collection, primary processing & value addition and be formed into clusters so as to aggregate their stock in tradable quantity and linking them with facility of primary processing in a Van DhanVikas Kendra.

The stock after primary processing shall be supplied by these SHGs to the State Implementing Agencies or direct tie up for supply to corporate secondary processor.

For creation of **secondary level value addition facility at district level** and **tertiary level value addition facility at State level**, Big Corporates shall be involved under PPP model.

Q.21) Consider the following statements regarding Kurukh language:

1. Kurukh belongs to the Northern Dravidian group of the Dravidian family of languages spoken by Oraon and Kisan Tribes people.
2. The language is marked as being in a "vulnerable" state in UNESCO's list of endangered languages.
3. Recently it has been given official Language status by Andhra Pradesh.
4. It is written in Devanagri script.

Which of the above statements are correct?

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

Q.21) Solution (c)

Kurukh is a Dravidian language spoken by nearly two million Oraon and Kisan tribespeople of Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha and West Bengal, as well as by 65,000 in northern Bangladesh, 28,600 a dialect called Dhangar in Nepal, and about 5,000 in Bhutan. Some Kurukh speakers are in South India. It is most closely related to Brahui and Malto

(Paharia). The language is marked as being in a "vulnerable" state in UNESCO's list of endangered languages. The Kisan dialect has 206,100 speakers as of 2011.

Kurukh belongs to the Northern Dravidian group of the Dravidian family of languages, and is closely related to Sauria Paharia and Kumarbhadg Paharia, which are often together referred to as Malto.

Kurukh is written in Devanagari, a script also used to write Sanskrit, Hindi, Marathi, Nepali and other Indo-Aryan languages. Narayan Oraon, a doctor, invented the Tolong Siki script specifically for Kurukh. Many books and magazines have been published in Tolong Siki script. The Kurukh Literary Society of India has been instrumental in spreading the Tolong Siki script for Kurukh literature.

In News:

The West Bengal Official Language (Amendment) Bill has been passed in the West Bengal Assembly, to declare Kurukh language to be used for official purposes in the state.

<http://www.millenniumpost.in/kolkata/bill-passed-to-declare-kurukh-as-language-for-official-use-284059>

Q.22) Recently, the Mayurbhanj district level committee (DLC) on the implementation of forest rights, has declined the proposal to confer habitat rights to Mankidia tribe inside simlipal tiger reserve. Consider the following statements:

1. There are 75 primitive tribal groups across the country but habitat rights haven't been recognised for any.
2. As per the forest rights act, "habitat" refers to the area comprising the customary habitat and such other habitats in reserved forests and protected forests of primitive tribal groups and pre-agricultural communities and other forest dwelling Scheduled Tribes.
3. Mankidia Tribe critically depends on making rope with siali fibre that's richly available in Similipal.

Which of the above statements are correct?

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

- c) 1 and 3
- d) All of the above

Q.22) Solution (d)

Mankidia, one of the 13 Particularly Vulnerable Tribal Groups (PVTG) in Odisha, were denied habitat rights inside the Similipal Tiger Reserve (STR) under the historic Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, as the State Forest Department has objected on grounds that tribals could be attacked by wild animals, especially tigers.

'Habitat' as defined under Section 2(h) of the FRA (Forest Rights Act) includes the area comprising the customary habitat and such other habitats in reserved forests and protected forests of primitive tribal groups and pre-agricultural communities and other forest dwelling Scheduled Tribes.

Mankidia, a marginalised group that critically depends on making rope with siali fibre that's richly available in Similipal, would now be deprived of the non-timber forest produce.

There are 75 primitive tribal groups across the country but habitat rights haven't been recognised for any.

<https://timesofindia.indiatimes.com/india/mankidias-kutia-kondhs-still-wait-for-their-habitat-rights-to-be-recognised/articleshow/62544988.cms>

<https://www.thehindu.com/news/national/mankidia-denied-habitat-in-simplipal/article22392195.ece>

Q.23) Which of the following particularly Vulnerable Tribes (PVTs) are correctly matched with the states where they are found?

Tribe	State
1. Chenchu, Dongria Khond	Andhra Pradesh/Telangana
2. Asurs, Mal Pahadia	Gujarat
3. Koraga	Bihar
4. Seharis	Rajasthan

Select the code from following:

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

Q.23) Solution (b)

Koraga – Karnataka

Asurs, Mal Phadia – Bihar/Jharkhand

For details read the following Link:

<http://vikaspedia.in/social-welfare/scheduled-tribes-welfare/primitive-vulnerable-tribal-groups>

Q.24) A traditional Cloth, Resangar Tawa, is woven once in 100 years for Sagaramisawa festival of Assam. Which of the following tribes weave this cloth?

- a) Tiwa
- b) Chutia
- c) Bhutia
- d) Miri

Q.24) Solution (a)

Tiwa is an Assamese tribe that practices Jhum or shifting cultivation for their livelihoods in Karbi Anglong district. They wear special attire to observe many rituals with different deities. One such traditional cloth is known as Resangar Tawa, which is weaved every hundred years, and used at Sagaramisawa festival.

<https://www.youtube.com/watch?v=w8kkQ8xz4L0>

Q.25) Consider the following statements regarding Brokpa community of Leh:

1. They are known as Dard Aryans and believed to be the last pure specimens of Aryan Race.
2. It is believed that they are the descendants of German Army which invaded during World War 2.

3. Brokpa tribals are identified by a colourful headgear called Tepi.

Which of the above statements are correct?

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

Q.25) Solution (c)

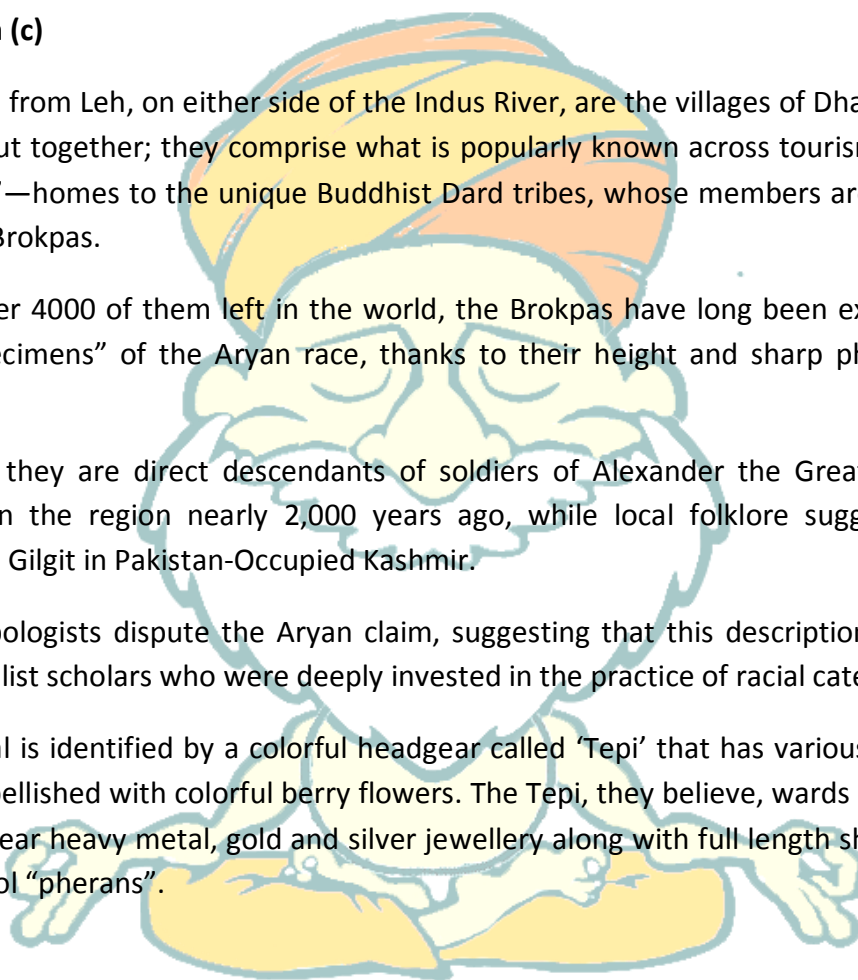
Nearly 200 km from Leh, on either side of the Indus River, are the villages of Dha, Hanu, Garkon and Darchik. Put together; they comprise what is popularly known across tourism circles as the “Aryan Valley”—homes to the unique Buddhist Dard tribes, whose members are known across the region as Brokpas.

With just under 4000 of them left in the world, the Brokpas have long been exoticised as the “last pure specimens” of the Aryan race, thanks to their height and sharp physical features (blue eyes).

Some believe they are direct descendants of soldiers of Alexander the Great’s army which stayed back in the region nearly 2,000 years ago, while local folklore suggests that they migrated from Gilgit in Pakistan-Occupied Kashmir.

Many anthropologists dispute the Aryan claim, suggesting that this description is a legacy of British Orientalist scholars who were deeply invested in the practice of racial categorisation.

A Brokpa tribal is identified by a colorful headgear called ‘Tepi’ that has various colorful props attached, embellished with colorful berry flowers. The Tepi, they believe, wards off the evil eye. The women wear heavy metal, gold and silver jewellery along with full length sheep skin capes and sheep wool “pherans”.



Q.26) Consider the following statements:

- 1. Work Force refers to the number of people able to work and willing to work. Since entire population cannot be engaged in economically productive activities, the dependents such as children and older people are not considered to be workers.
- 2. Labour force refers to those actually engaged in commercially productive activity.

3. Work Force Participation Rate (WFPR) is defined as the number of persons in the labour force per 1000 persons.
4. Labour Population Ratio (LPR) is defined as the number of persons employed per 1000 persons.

Which of the above statements are correct?

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

Q.26) Solution (d)

Explanation:

In all the above statements the word worker/workforce has been replaced by labour/labourforce.

Labour Force or Labour supply refers to the number of people able to work and willing to work. Since entire population cannot be engaged in economically productive activities, the dependents such as children and older people are not considered to be labour. The labour force also excludes the people who are unwilling to work despite of their being able to.

Workforce refers to those actually engaged in commercially productive activity. The difference between workforce and labour force is unemployment.

Unemployment = Labour Force – Work Force

Labour Force Participation Rate (LFPR) is defined as the number of persons in the labour force per 1000 persons.

Worker Population Ratio (WPR) is defined as the number of persons employed per 1000 persons.

Q.27) The Cultural Zones of India are overlapping zones defined by the Ministry of Culture of the Government of India to promote and preserve the cultural heritage of various regions of India. Which of the following statements regarding 'Cultural Zones' are correct?

1. Ministry has divided India into 5 cultural zones – North, South, West, East and North East.
2. Their stated goal is "to strengthen the ancient roots of Indian culture and evolve and enrich composite national culture".
3. Old Delhi is known as the Cultural Capital of India.

Select the code from following:

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

Q.27) Solution (b)

The Cultural Zones of India are seven overlapping zones defined by the Ministry of Culture of the Government of India to promote and preserve the cultural heritage of various regions of India.

In addition to the above mentioned 5 zones, we also have a North Central as well as a South Central zone.

The city of Kolkata, formerly the capital of British India and West Bengal, is also known as the "Cultural Capital of India."

Q.28) Dharavi Redevelopment Project has been awarded to Dubai-based Seclink Technology Corporation. Which of the following statements regarding Dharavi is/are correct?

1. It is Asia's biggest slum area with more than 1 million population.
2. It lies in the heart of Kolkata and covers more than 500 acres of land.

Select the code from following:

- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Q.28) Solution (a)

Asia's largest slum, Dharavi, lies on prime property right in the middle of India's financial capital, Mumbai (Bombay).

It is home to more than a million people. Many are second-generation residents, whose parents moved in years ago.

Today's Dharavi bears no resemblance to the fishing village it once was. A city within a city, it is one unending stretch of narrow dirty lanes, open sewers and cramped huts.

In a city where house rents are among the highest in the world, Dharavi provides a cheap and affordable option to those who move to Mumbai to earn their living. Rents here can be as low as 185 rupees per month. As Dharavi is located between Mumbai's two main suburban rail lines, most people find it convenient for work.

Even in the smallest of rooms, there is usually a cooking gas stove and continuous electricity.

Many residents have a small colour television with a cable connection that ensures they can catch up with their favourite soaps. Some of them even have a video player.

Dharavi also has a large number of thriving small-scale industries that produce embroidered garments, export quality leather goods, pottery and plastic.

Most of these products are made in tiny manufacturing units spread across the slum and are sold in domestic as well as international markets.

<http://www.newindianexpress.com/cities/mumbai/2019/feb/19/dealing-with-socio-economic-fallout-key-to-successful-implementation-1940549.html>

Q.29) Consider the following statements regarding density of population in india:

1. The Population density in 2011 has increased from a figure of 324 in 2001 to that of 382 per square kilometre, which is considerably higher than the average population density of the world 2011.
2. The density of population in India has always been on increase since the 1901 Census up till 2011 Census.

Which of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) All of the Above.

Q.29) Solution (a)

The density of population in India was 77 persons/sq km in 1901, 82 persons/sq km in 1911 and 81 persons/sq km in 1921. Hence in 1921 it experienced a decrease. After 1921, it has been on a steady rise but the rate of increase has slowed down in past two decades.

Note: Census of 1921 is a watershed event in the demography of India.
Kindly see the table given in the following PDF:

http://censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011chapter7.pdf

Q.30) Consider the following statements:

1. Delhi has the highest and Lakshadweep has the lowest population density amongst the Union Territories.
2. West Bengal has the Highest and Mizoram has the lowest population density amongst states.

Which of the above statements is/are correct?

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

Q.30) Solution (d)

Andaman and Nicobar islands have the lowest population density in case of UT's at 46 persons/sq km.

Bihar at 1102 persons/sq km is higher than West Bengal at 1029 persons/sq km. Similarly Arunachal Pradesh at 17 persons/sq km is lower than Mizoram at 52 persons/sq km.

Overall both in case of states and UT's Delhi has the highest density of Population at 11,297 persons/sq km.

Q.31) Urban sprawl is defined as low density residential and commercial development on undeveloped land. Which of the following can be the causes of Urban Sprawl?

1. Population growth in Urban Areas
2. Decrease in living standard of urban population
3. Expansion of urban infrastructure around an urban area
4. Unplanned development and pollution in urban area

Select the code from following:

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

Q.31) Solution (c)

Urban sprawl is basically another word for urbanization. It refers to the migration of a population from populated towns and cities to low density residential development over more and more rural land. The end result is the spreading of a city and its suburbs over more and more rural land. In other words, urban sprawl is defined as low density residential and commercial development on undeveloped land.

Urban sprawl can be caused by a variety of different things. These causes will mainly include:

- **Lower Land Rates:** Lower cost land and houses in the outer suburbs of the cities, because the centers of urban development have really made people want to stop settling in these areas and want to venture further out.
- **Improved Infrastructure:** There is increased spending on certain types of infrastructures, including roads and electricity. This is something that hasn't always been available, and there are still some areas that don't have these luxuries. That doesn't mean that they aren't working on it.

- **Rise in Standard of Living:** There are also increases in standards of living and average family incomes, which means that people have the ability to pay more to travel and commute longer distances to work and back home.
- **Lack of Urban Planning:** People love to find areas that are less trafficked and more calm, which leads them to sprawl out to other sections of the town. Unprecedented development, cutting of trees, loss of green cover, long traffic jams, poor infrastructure force people to move out to new areas.
- **Lower House Tax Rates:** Cities will usually have high property taxes, and you can usually avoid these taxes by living in the outer suburbs because the taxes are usually lower than they would be in other situations.
- **Rise in Population Growth:** Another factor that contributes towards urban sprawl is rise in population growth. As number of people in a city grows beyond capacity, the local communities continues to spread farther and farther from city centers.
- **Consumer Preferences:** People in high income groups have stronger preferences towards larger homes, more bedrooms, bigger balconies and bigger lawns. This also causes urban sprawl as this option is not available in crowded cities. People generally look out for low-density residential areas where they can get home according to their preference.

Q.32) IHUWASH project stands for Innovation Hub for Urban Water, Sanitation, and Hygiene (IHUWASH) solution in India. Which of the following statements are correct regarding IHUWASH?

1. It has been started by The National Institute of Urban Affairs (NIUA) is a premier institute and an autonomous body under the Ministry of Housing & Urban Affairs.
2. IHUWASH primarily focuses on scaling and replicating localised solutions for WASH and work as an ecosystem.
3. Initially IHUWASH has been launched in three focus cities of Mysuru, Udaipur and Faridabad.

Select the code from following:

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

Q.32) Solution (d)

The National Institute of Urban Affairs (NIUA) is a premier institute and an autonomous body under the Ministry of Housing & Urban Affairs, Government of India (GoI) for research and capacity building in the urban sector. The primary goal of NIUA is to promote integrated solutions for rapidly growing urban centres in the country, and address various challenges they face to provide improved services to citizens. Over the years, NIUA has also been supporting a number of urban local bodies through its capacity building programmes, conducting research for specific urban issues, and creating knowledge platforms like Smartnet.

NIUA conceived the **IHUVASH** project, which primarily focuses on scaling and replicating localised solutions and work as an ecosystem. NIUA with the support of United States Agency for International Development (USAID) endeavoured to create an Innovation Hub for Urban Water, Sanitation, and Hygiene (IHUVASH) solution in India. During its inception stage, the hub focused on understanding the local WASH needs of the cities and identify innovative solutions—new and existing—that are relevant to the local context. The idea was to adopt business models and best practices, and replicate them in the local context. The solution may not be the same for each city, as it would differ depending on their needs. Hence, it was essential to create an ecosystem to support that replication and scaling of solutions.

IHUVASH in its focus cities of Mysuru, Udaipur, and Faridabad has created City Innovation Hubs within the municipal corporations under the guidance of the city commissioners. The municipal corporations with IHUVASH facilitation have collaborated with local technical institutions to create WASH labs that support the municipal corporations in implementing the innovative WASH solutions.

The National Institute of Engineering at Mysuru, Geetanjali Institute of Technical Studies at Udaipur, and Manav Rachna International Institute of Research Studies at Faridabad house the WASH Labs in the respective cities.

Q.33) Consider the following statements regarding the Population Policies in India:

1. In 1940, the Indian National Congress had appointed a committee on population under the leadership of renowned social scientist Radha Kamal Mukherjee to come up with suggestions to arrest increasing population of the country.

2. Government of India in 1943 appointed a Health Survey and Development committee under the chairmanship of Sir Joseph Bore which suggested 'deliberate limitation of family' approach as a way for controlling population
3. In 1951, India became the first among the developing countries to come up with a state sponsored family planning programme.
4. In 1976, the government of India came up with its first National Population policy which talked of a "direct assault" to tackle population problem.
5. In 2019, the government of India came up with the second National Policy on Population which comprehensively addressed the problem of population growth in integration with issues such as child survival, maternal health, women empowerment and contraception.

Which of the above statements are correct?

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

Q.33) Solution (a)

Population Policy Measures in India:

- In 1940, the Indian National Congress had appointed a committee on population under the leadership of renowned social scientist Radha Kamal Mukherjee to come up with suggestions to arrest increasing population of the country.
- Government of India in 1943 appointed a Health Survey and Development committee under the chairmanship of Sir Joseph Bore. This committee had suggested 'deliberate limitation of family' approach as a way for controlling population, which cannot be achieved through self control 'to any material extent'.
- In 1951, India became the first among the developing countries to come up with a state sponsored family planning programme. The Planning Commission which was set up in 1950 was given the task to decide upon the contours of the family planning programme.
- In 1976, the government of India came up with its first National Population policy. It talked of a "direct assault" to tackle this problem.
- In February 2000, the government of India came up with the second National Policy on Population which comprehensively addressed the problem of population growth in

integration with issues such as child survival, maternal health, women empowerment and contraception.

Q.34) Jansankhya Sthirata Kosh/National Population Stabilization Fund has adopted the Prerna and Santushti strategies as a population control measure. Which of the following statements regarding this are correct?

1. Santushti Strategy is for helping to push up the age of marriage of girls and delay in first child and spacing in second child the birth of children in the interest of health of young mothers and infants.
2. Prerna Strategy invites private sector gynaecologists and vasectomy surgeons to conduct sterilization operations in Public Private Partnership mode. The private hospitals/nursing home who achieved target to 10 or more are suitably awarded as per strategy.

Select the code from following:

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

Q.34) Solution (d)

Prerna Strategy:- JSK has launched this strategy for helping to push up the age of marriage of girls and delay in first child and spacing in second child the birth of children in the interest of health of young mothers and infants. The couple who adopt this strategy awarded suitably. This helps to change the mindsets of the community.

Santushti Strategy:- Under this strategy, Jansankhya Sthirata Kosh, invites private sector gynaecologists and vasectomy surgeons to conduct sterilization operations in Public Private Partnership mode. The private hospitals/nursing home who achieved target to 10 or more are suitably awarded as per strategy.

Q.35) Which of the following statements are correct regarding India's literacy rate according to 2011 census?

1. A person aged seven and above, who can both read and write with understanding in any language is treated as literate.
2. India's literacy rate is at 74.04% and Kerala is the most literate state in India, with 93.91% literacy.
3. Rajasthan is the least literate state in India, with a literacy of 63.82% closely followed by Bihar at 66.1%.

Select the code from following:

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

Q.35) Solution (a)

According to Census 2011, Kerala has the highest total literacy rate and female literacy rate whereas Lakshadweep had the highest male literacy rate. Bihar has the lowest total literacy rate and male literacy rates while Rajasthan has the lowest female literacy rate.

Q.36) Consider the following statements related to Sex ratio in India:

1. Amongst the Indian states, the lowest sex ratio in India is in Haryana, where sex ratio is only 879 whereas the highest sex ratio is in Kerala (1084).
2. Puducherry has highest sex ratio of 1037 while Daman and Diu has lowest sex ratio (618) among all the union territories of India.
3. Puducherry and Lakshadweep are the only two union territories which have sex ratio of more than 900 females per thousand males.

Which of the following statements are correct?

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

Q.36) Solution (d)

All the statements given above are correct.

Sex ratio is used to describe the number of females per 1000 of males. In India it is especially significant because the ratio is heavily skewed towards men. In the Population Census of 2011 it was revealed that the population ratio of India 2011 is 943 females per 1000 of males. The Sex Ratio 2011 shows an upward trend from the census 2001 data. Census 2001 revealed that there were 933 females to that of 1000 males.

The Indian census 2011 state wise shows that Kerala represents the highest sex ratio with 1084 females per 1000 males while Haryana features the lowest sex ratio in India with just 877 women per 1000 males.

Q.37) Consider the following statements:

1. A Conurbation essentially consists of one mother city or major city and its outgrowths that are in process of getting urbanised and subsequently getting subsumed by the mother city, also called 'urban spread'.
2. Urban agglomeration on the other hand, essentially means two or more urban areas (in their own right) having daily functional linkages with each other, separated by vast rural tracts of more than 10 km.

Which of the above statements are correct?

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

Q.37) Solution (d)

The Terms Urban Agglomeration and Conurbation has been interchanged in the above statements.

An urban agglomeration essentially consists of one mother city or major city and its outgrowths (located adjoining to the city or within one or 2 km distance and that are in process of getting urbanised and subsequently getting subsumed by the mother city ,also called 'urban spread' – examples are the classic definition of our Census: and in this I may give the example of Hyderabad which had originally 12 outgrowths (essentially rural areas) in 1971 and today are part and parcel of Greater Hyderabad Municipal Corporation (GHMC).

Conurbation on the other hand, essentially means two or more urban areas (in their own right) having daily functional linkages with each other, separated by vast rural tracts of more than 10 km, etc. : one example that comes to mind is the Vijayawada-Guntur-Tenali-Mangalagiri Conurbation. Another example is Delhi-Ghaziabad-NOIDA-Faridabad-Meerut conurbation.

Q.38) Which of the following will lead to an increase in population at a place?

1. Increase in crude birth rate
2. Increase in crude death rate
3. Increase in migration

Select the code from following:

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

Q.38) Solution (c)

Population at a place is dependent on three important factors –

Crude Birth rate - The Crude Birth Rate (CBR) is defined as the number of live births per thousand population. It is usually the dominant factor in determining the rate of population growth. Primary source of data for births and deaths is the registration of births and deaths under Civil Registration System (CRS) of the Office of Registrar General, India (ORGI).

Crude Death Rate - The Crude Death Rate (CDR) indicates the number of deaths occurring during the year, per 1, 000 population estimated at midyear. Subtracting the Crude Death Rate from the Crude Birth Rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.

Migration – Migration is temporary or permanent change of residence of people from one place to another.

Q.39) Consider the following statements regarding cities of India:

1. Indian Census classifies cities in four classes according to population.

2. The cities with population beyond five million are known as mega cities.
3. More than 90 per cent of urban population in India lives in Class I towns.

Which of the above statements are NOT correct?

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

Q.39) Solution (c)

Based on the population size, the census of India classifies urban centers into **six classes** (see the table given below).

S.No. Classes & Population

- 1 Class I - 100,000 and above
- 2 Class II - 50,000 to 99,999
- 3 Class III - 20,000 to 49,999
- 4 Class IV - 10,000 to 19,999
- 5 Class V - 5,000 to 9,999
- 6 Class VI - less than 5000

- The cities with population beyond five million are known as mega cities.
- Urban agglomeration forms in a situation when a town and its adjoining urban areas outgrowth, or two or more contiguous towns with or without their outgrowth, or a city and one or more adjoining towns with their outgrowth together forming a contiguous spread.
- More than 60 per cent of urban population in India lives in Class I towns.
- Out of total 423 cities, 35 cities/urban agglomerations are metropolitan cities and six of them are mega cities.

Q.40) Which of the following shape of settlement are correctly matched with the region where they are found?

Settlement Shape	Location
1. Linear	Along a river or Road
2. Rectangular	Fertile plain areas
3. Star Pattern	Railway line or road intersections
4. Circular	Along the lake or tank

Select the code from following:

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

Q.40) Solution (d)

On the basis of forms or shapes of the settlements, rural settlements are classified as –

- Linear,
- Rectangular,
- Circular,
- Star like,
- T-shaped village,
- Y-shaped village,
- Compact,
- Disperse,
- Planned, etc.

The settlement in which houses are constructed along a road, railway line, river, canal edge of a valley, or along a levee is known as **Linear Pattern**.

The settlements in which houses are constructed in a rectangular shape is known as **Rectangular Pattern**. Such kind of settlements is found in plain areas or/and in wide inter-montane valley.

The settlements in which houses are constructed in a circular shape is known as **Circular Pattern**. Such kind of settlements is found around lakes, tanks, or a planned village.

The settlements in which houses are constructed in a star shape is known as **Star like Pattern**. Such kind of settlements is found around the points where several roads cross each other (making star shape).

The settlements in which houses are constructed at the tri-junctions of the roads is known as **T-shaped Pattern**. Such kind of settlements is found along the road, which meets with another road at the dead end (the straight going road ends) and bifurcates left and right (T-Shape).

The settlement in which houses are constructed along the straight going road, which further bifurcates into two roads (similar to Y shape) is known as **Y-Shape pattern**.

