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NIMBUS TIMES

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HIMACHAL CURRENT AFFAIRS May Month

NATIONAL/INTERNATIONAL Current Affairs

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HIMACHAL-MAINS GS-1 MANUAL

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PREFACE

This booklet of Current Affairs is an attempt so as to help the Civil Services Aspirants in their process of learning, understanding and analyzing each and every aspect of the current issue in the easiest possible manner. In order to make the understanding of the current affairs a long lasting affair and to help students score good marks in the examination; a balance between factual content and analytical approach has been maintained in this booklet.

The booklet has been meticulously designed to suit the needs of Civil Service Aspirants appearing in IAS and State PSC examinations. In addition, it would benefit all those who are preparing for other competitive examinations or such individuals who are knowledge starving and have a passion to learn more.

Owing to nature of the booklet, the Nimbus Academy Team has prepared the material with the help of the facts and the information provided by various Ministries of Govt. of India and merging those with the concepts developed by the subject matter experts.

Reader's suggestions and feedback directed towards improvements are welcome and can be e-mailed at nimbusias@gmail.com

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HAS-MAINS TEST SERIES-2019

Test No.	Date & Day	Subject	Syllabus
Mock-1	23rd June, 2019 (Sunday)	GS Paper-1	Unit-I (Sub-Unit-I)
			Unit-II (Sub-Unit-I)
			Unit-III (Sub-Unit-I)
Mock-2	30th June, 2019 (Sunday)	GS Paper-2	Unit-I (Sub-Unit-I)
			Unit-II (Sub-Unit-I)
			Unit-III (Sub-Unit-I)
Mock-3	7th July, 2019 (Sunday)	GS Paper-3	Unit-I (Sub-Unit-I)
			Unit-II (Sub-Unit-I)
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Mock-4	7th July, 2019 (Sunday)	ESSAY-1	FULL SYLLABUS
Mock-5	13 July, 2019 (Saturday)	GS Paper-1	Unit-I (Sub-Unit-II)
			Unit-II (Sub-Unit-II)
			Unit-III (Sub-Unit-II)
Mock-6	14 July, 2019 (Sunday)	GS Paper-2	Unit-I (Sub-Unit-II)
			Unit-II (Sub-Unit-II)
			Unit-III (Sub-Unit-II)
Mock-7	20 July, 2019 (Saturday)	GS Paper-3	Unit-I (Sub-Unit-II)
			Unit-II (Sub-Unit-II)
			Unit-III (Sub-Unit-II)
Mock-8	21 July, 2019 (Sunday)	GS Paper-1	Unit-I (Sub-Unit-III)
			Unit-II (Sub-Unit-III)
			Unit-III (Sub-Unit-III)
Mock-9	27 July, 2019 (Saturday)	GS Paper-2	Unit-I (Sub-Unit-III)
			Unit-II (Sub-Unit-III)
			Unit-III (Sub-Unit-III)
Mock-10	28 July, 2019 (Sunday)	GS Paper-3	Unit-I (Sub-Unit-III)
			Unit-II (Sub-Unit-III)
			Unit-III (Sub-Unit-III)
Mock-11	28 July, 2019 (Sunday)	ENGLISH LANGUAGE	FULL SYLLABUS
Mock-12	3rd August (Saturday)	GS Paper-1	(Full Length Test)
Mock-13	4th August (Sunday)	GS Paper-2	(Full Length Test)
Mock-14	4th August (Sunday)	HINDI LANGUAGE	FULL SYLLABUS
Mock-15	10th August (Saturday)	GS Paper-3	(Full Length Test)
Mock-16	10th August (Saturday)	GS Paper-1	(Full Length Test)
Mock-17	11th August (Sunday)	GS Paper-2	(Full Length Test)
Mock-18	11th August (Sunday)	GS Paper-3	(Full Length Test)
Mock-19	18th August (Sunday)	ESSAY-2	FULL SYLLABUS
Mock-20	18th August (Sunday)	GS Paper-1	(Full Length Test)
Mock-21	25th August (Sunday)	GS Paper-2	(Full Length Test)
Mock-22	25th August (Sunday)	GS Paper-3	(Full Length Test)

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HIMACHAL CURRENT AFFAIRS

Himachal high court gets two new judges

Anoop Chitkara and **Jyotsna Rewal Dua** were sworn in as the Judge and Additional Judge respectively of the high court of Himachal Pradesh. They were administered oath of office by **Justice Dharam Chand Chaudhary, the Acting Chief Justice** in a ceremony held in the high court at Shimla.

Facts to know: In the year 1966, the Delhi High Court Act was enacted by the Government of India and w.e.f. **1 May 1967**, the Central Government of India extended jurisdiction of the said Act to the Union Territory of Himachal Pradesh, replacing the Court of Judicial Commissioner by the Himachal Bench of Delhi High Court, at Shimla and it started functioning in old High Court building known as "**Revenswood**". On 18 December 1970, the State of Himachal Pradesh Act was passed by Parliament and the new state came into being on 25 January 1971 and established its own High Court with headquarters at "Revenswood" Shimla. **M.H. Beg** was appointed first chief justice of HP High Court.

17th Lok Sabha Election 2019 Himachal voted for BJP

Kangra Seat: BJP candidate Kishan Kapoor is leading by 4,57,133 votes over his nearest rival Pawan Kajal of Congress

Hamirpur Seat: Sitting BJP MP Anurag Thakur is leading by 3,84,922 votes in Hamirpur over his nearest rival Ram Lal Thakur of Congress.

Shimla Seat (reserved): BJP candidate Suresh Kashyap of the BJP is leading by 3,23,659 votes over his nearest rival Dhani Ram Shandil of Congress.

Mandi Seat: Sitting BJP MP Ram Swaroop is leading by 3,77,001 votes over his nearest rival Aashray Sharma of the Congress in Mandi.

Facts to know: State elect 3 member to Rajya Sabha for the term of 6 years and indirectly elected by the state legislators, since year 1956 (first in 1952). **Currently Viplov thakur 2014-20 (INC), Anand Sharma 2016-22 (INC), JP Nadda 2019-24 (BJP) represent the State in the House.**

Chiranji Lal Verma was first to represent Himachal Pradesh In Rajya sabha back in 1952.

In 1952, 3 members were in lok Sabha from **Mahasu, Mandi And Chamba-Sirmour seats. Rani Amrit Kaur (Mandi) was first health minister in Union Government.**

Other Election Highlights

1. Around 5000 women performed at Kullu's Dhalpur ground in their traditional dress, earlier to create a record of 'Largest folk dance with voter cards'. Their feat made an entry in the India Book of Records. The performance by the women was also aimed at creating awareness about the Lok Sabha elections, as reported by ANI.
2. Shyam Saran Negi, a 102-year-old voter who also participated in the 1951-52 general elections which were the country's first, cast his ballot on Sunday at a picturesque hamlet in Kinnaur district as elections were held to elect four members of Parliament from Himachal Pradesh. In 1951, Negi, a retired schoolteacher, was on an election duty and exercised his franchise in Chini constituency - later renamed Kinnaur. At that time, balloting in the snow-bound areas of the hill state was held ahead of other places in the country. This time he cast his 31st vote. He has voted in 17 parliamentary and 14 Assembly polls.

3. Nearly 1,000 Citizens Over Age Of 100 To Vote In Himachal Pradesh. Of the 7,730 polling booths in Himachal Pradesh, seven have been set up especially for senior citizens.
4. Himachal today recorded the highest-ever voter turnout in any parliamentary elections at 70.40 per cent, as compared to the all-time high of 65.32 in the 1998 Lok Sabha elections. The highest polling of 73.02 per cent was registered in the Mandi Lok Sabha segment, followed by Shimla at 71.59, Hamirpur at 71.26 and Kangra 66.18. The highest polling of 73.02 per cent was registered in the Mandi Lok Sabha segment, followed by Shimla at 71.59, Hamirpur at 71.26 and Kangra 66.18.

Himachal plans ropeway transport system in remote areas

The Himachal Pradesh government may introduce the ropeway transport system used in countries such as Bolivia, Switzerland and Austria in remote and inaccessible area of the state for providing all-weather connectivity.

"The transportation system is extremely robust as it can withstand extreme temperature and high wind speeds and can be used for providing connectivity over many snow clapped mountains and passes. The system could help in providing all weather connectivity to inaccessible areas in Himachal Pradesh," said Sanjay Kundu, Additional Principal Secretary to the Chief Minister. Kundu recently led a delegation of government officials to Bolivia, Switzerland and Austria to study the ropeway system as a solution for urban and rural transport. They also visited the manufacturing units of the top ropeway companies in the world.

Facts to know: In Budget Speech 2019-20, Chief Minister has mention to establish the **Ropeway and Rapid Transport System Development Corporation (RRTDC) in the Transport department of the State**. The RRTDC will get a prefeasibility study conducted to establish overhead mass rapid transportation system in Shimla and Manali Towns.

Himachal Pradesh to have SDRF on lines of NDRF

Himachal Pradesh government will establish a state disaster response force on the lines of National Disaster Response Force (NDRF) to generate a prompt and efficient response at the time of disasters. While chairing the 9th meeting of state executive committee (SEC) in Shimla, chief secretary BK Agarwal said that state is one of the most multi-hazard prone states of the country and faces various hazards like geological hazards, earthquakes and landslides, hydrological hazards such as floods, flash floods and glacial outbursts, besides meteorological hazards, hailstorms, droughts and cloudbursts. Thus it was essential to constitute SDRF in state

Agarwal said that state disaster response force, consisting of three companies from police, will be raised for dealing with disasters and emergencies. He said that **each company will have 100 personnel** each and for effective response at the time of disaster SDRF stations will be set up in **Mandi, Arki, and Mubarakpur**. It was also approved to constitute a state disaster mitigation fund to take preventive measures for reduction of disasters. He said that the SDRF will be under overall supervision of the department of revenue-disaster management government of Himachal Pradesh.

Facts to know: The **Disaster Management Act, 2005** has been enacted as the central Act to deal with the management of disasters. This act envisaged a three tier Disaster Management structure in India at National, States and District levels. Under the act, the NDMA, SDMA, NEC, NDRF, NIDM and disaster related funds were established.

Himachal seeks speedy settlement of Pong dam oustees issue

Himachal Pradesh chief secretary B K Agarwal has urged Union water resources secretary U P Singh to quickly resolve long pending issues of Pong dam oustees. For the construction of the Pong Dam, 75,2668

acres of land was acquired. Of the total 339 villages, complete acquisition of land was done in 226 villages while partial acquisition was done in 116 villages of Dehra and Nurpur tehsils of Kangra district. **Total 20,722 families were affected**, out of whom 16,352 displaced were found eligible for the allotment of land in Rajasthan. Agarwal also emphasized that order of the Supreme Court should be complied with under which the allotment of 1,188 plots by Rajasthan was held illegal and cancelled.

Issue of Pong Dam oustees was even raised in the Himachal Pradesh assembly in December 2018. While raising the issue, **Dehra MLA Hoshiyar Singh** had questioned the failure of Rajasthan to allot land to people who had to give up their property for the construction of dam. **He had called Pong Dam “Hiroshima of Himachal Pradesh” as its construction had displaced 2.5 lakh people.** Chief minister Jai Ram Thakur had informed the state assembly that Rajasthan had so far allotted plots to 12,027 dam oustees, of which 1,188 plots were cancelled according to the directions of the Supreme Court. Another 2,830 plots were cancelled for failing to take possession and failing to pay the instalment by Rajasthan. He had stated that according to records, only 8,009 people had taken the possession of land, while 2,180 files were pending with Rajasthan.

Facts to know: The **Pong Dam**, also known as the **Beas Dam**, is an earth-fill embankment dam on the Beas River in the state of Himachal Pradesh. The Pong Dam is a 133 m (436 ft) tall and 1,951 m (6,401 ft) long earth-fill embankment dam with a gravel shell. It is 13.72 m (45 ft) wide at its crest and 610 m (2,001 ft) wide at its base, construction on the dam began in 1961 and was completed in 1974. At the time of its completion, the Pong Dam was the tallest of its type in India. The reservoir created by the dam, Maharana Pratap Sagar, has a gross capacity of 8,570,000,000 m³.

Dam safety in Himachal Pradesh be damned

On May 3rd, 2019, Divya Himachal, a Hindi daily, reported that the 100 MW Sainj Hydropower Project in Himachal Pradesh's Kullu district had stopped its operations after severe leakage due to massive cracks in the dam was noticed. Owned by the Himachal Pradesh Power Corporation Ltd (HPPCL), the project has been non-operational for more than a month, creating a loss of Rs 5 crore so far for the company. Himachal Pradesh, known for its booming hydro power sector, has failed to provide for monitoring and accountability mechanisms, thereby creating risks for the people. Moreover, the manner in which increasing disasters around 'dammed' areas are being dealt with in the state, one doubts whether dam safety cells even exist. Concrete reasons for the same were revealed in Right to Information (RTI) responses received from the Directorate of Energy (DOE).

Himachal's mountainous landscape, though exquisite, is seismically fragile. According to Landslide Hazard Zonation Atlas of India, 2003, more than 97 per cent of the total geographical area of the state is prone to landslides. In this highly landslide-prone state, 153 hydropower projects (HPPs) have been commissioned as of March 2019, records the DOE. Astoundingly, a 2015 study of the State Disaster Management Authority warns that 56 per cent of Himachal's total constructed HPPs are under serious threat of landslide hazard risks. Any construction that involves underground disturbance, working near fast flowing rivers prone to flash floods and eroding the soil of steep slopes is risky business. Despite this state of affairs, Himachal's valleys are set to see 863 more HPPs, which are either under construction or at different stages of clearance.

Facts to know:

1. The State of Himachal Pradesh has an estimated Hydro Potential of 27,436 MW out of which 24,000 MW has been assessed as harnessable.
2. Out of the total harness able potential of about 24,000 MW, a potential to the tune of 20,912 MW already stands allotted under various sectors.
3. A potential of about 10,547.17 MW has already been harnessed so far under various sectors.

Himachal Pradesh goes back on cannabis cultivation decision

Within hours of issuing an official statement on Tuesday that, like Uttarakhand, a proposal on cultivation of cannabis for medicinal purposes can be examined by Himachal Pradesh, the government took a step back by withdrawing it. The subsequent note did not find any mention of cannabis cultivation. The statement quoting Chief Secretary B.K. Agarwal said "the Israel Embassy is already pursuing a proposal with the government of Uttarakhand on development of cannabis for medicinal and hemp purposes". "A similar proposal can be examined by Himachal Pradesh for controlled cultivation of cannabis for medicinal purposes and cultivation of low psychotropic content cannabis for hemp production," it said. The note mentioned that a meeting of senior government functionaries led by Agarwal was held with the Ambassador of Israel Ron Malka in New Delhi to discuss issues related to state's Global Investors Meet to be held in Dharamsala in September.

Other Dimensions of the issue:

1. A section of growers, mainly in Shimla and Mandi parliamentary constituencies, for long have been asking the main political parties -- the Congress and the BJP -- that cannabis and poppy cultivation need to be legalised and promoted to supplement their income. They say their main apple crop is declining owing to various reasons, including variable climatic conditions.
2. Experts say there is a huge demand for opium, an extract of the poppy, in the pharmaceutical industry. Also, the climatic condition in the state is congenial for its cultivation. They argue that states like Rajasthan and Madhya Pradesh have allowed selective cultivation of poppy which greatly helped to strengthen the rural economy.
3. During his campaign in the 2014 Lok Sabha elections, Virender Kashyap had said poppy cultivation was not banned before Independence and its cultivation was a common practice in the state. Even three-time BJP MP Maheshwar Singh in November last wrote a letter to Chief Minister Jai Ram Thakur, asking to legalise cannabis and poppy cultivation as they would not only generate employment but would also stop the illegal trade in its contraband by-products.
4. Experts say the selective cultivation of cannabis and poppy could annually generate a revenue of Rs 800 crore-Rs 900 crore.
5. Former superintendent of the Narcotics Control Bureau, O.P. Sharma, who was leading the state's first drive to eradicate mass-scale cannabis cultivation in 2003, told IANS that "alternative farming is the only way of controlling poppy and cannabis cultivation."

Centre sanctioned 69 highways in Himachal

BJP leader and Union Road Transport Minister Nitin Gadkari on Wednesday said the Central government has sanctioned 69 national highways in Himachal Pradesh, the construction of most of which are underway. Gadkari also said the BJP government in the state has speeded up the pace of development with support of the current Central government. He was speaking at an election rally in Sangla in Kinnaur district, some 300 km from the state capital.

Gadkari pointed out that there is a tremendous potential for tourism in the state. "With the strengthening of the road network, tourism business has increased in the last five years and the state has made a new name on the tourism map," he said.

50,000 farmers to be trained in natural farming in Himachal Pradesh

Governor Acharya Devvrat said that Himachal Pradesh government had fixed the target to train and cover about 50,000 farmers under natural farming in this financial year. Expressing satisfaction over the progress made by state in the direction of natural farming, he hoped that by 2022, Himachal would emerge as a fully natural farming state. Devvrat was presiding over the closing session of workshop on Subhash Palekar

Natural Farming under 'Prakritik Krishi Khushal Kisan Yojana' organized by agriculture department at Dr YS Parmar University of Horticulture and Forestry), Nauni in Solan.

Natural Farming or ZBNF: Zero-Budget Natural Farming (ZBNF) is a holistic alternative to the present paradigm of high-cost chemical inputs-based agriculture. It is very effective in addressing the uncertainties of climate change. ZBNF principles are in harmony with the principles of Agroecology. UN-FAO in April 2018 urged all countries to move towards the adoption of Agroecology to meet the twin goals of global food security and conservation of the environment.

New industrial policy awaits Cabinet nod

The state's new industrial policy promising a slew of incentives to the investors was awaiting a Cabinet nod after the finance department had accorded its approval. The government was keen to announce this policy ahead of its global investors meet where a delegation headed by Chief Minister was slated to visit Germany, UAE and the Netherlands in early June.

Sources said major incentives would include availability of plots at subsidized rates, reduction in the stamp and electricity duty besides subsidy on transport, registration fee, etc.

While suggestions of various stakeholders were elicited to ensure that the policy covered all significant areas of concern, its Cabinet approval would pave the way for its announcement. Since the last industrial policy was announced in 2004, the investors were keenly awaiting the new policy which would also include the budget allocation for various financial incentives.

Key issues like speedier clearance under Section 118 of the HP Tenancy and Land Reforms Act, 1972, which was a major impediment in setting up industries in the state is likely to be simplified in the new policy.

With a view to rehabilitating sick units, provisions of granting some concessions in the interest, penal interest, etc., has also been proposed. A proposal to allow renting of surplus built-up area and sale of surplus land as well as 1 per cent interest subvention on a term loan of three years have also been mooted. It remains to be seen how much budget has been set aside for this aspect.

In a bid to consolidate unorganised scrap vendors, a provision to register them and extending concessions in power back up, green fuel gas, power tariff, the SGST, reimbursement of interest subsidy, purchase preference, credit guarantee trust fund for MSME and annual guarantee fee, etc., have also been mooted which were supposed to attract the investors in a big way.

Development of mini clusters for enhancing the competitiveness of the micro small and medium sector enterprises (MSME) by financial assistance has also been mooted where Rs 2 crore would be provided per cluster. The MSME units based on cow urine would be granted 20 per cent investor subsidy on purchase of plant and machinery. This will be in addition to such a subsidy being provided by the Union Government.

'Chuli' oil, 'kaala zeera' of Kinnaur get GI tag

Two products of Kinnaur - chuli (wild apricot) oil and kaala zeera - have got the Geographical Indications (GI) tag from the Registrar General of GI, Chennai. With this, the total number of products that have been registered by the patent cell of the Council for Science, Technology and Environment from Himachal under the GI registration has risen to seven.

The other products include Kullu shawl, Kangra tea, Chamba rumaal, Kinnauri shawl and Kangra miniature paintings. The decks for GI registration of chuli oil and kaala zeera had been cleared almost five months back, but the process could be completed only after public objections were invited and nobody else laid claim over the product being native of their area.

Chuli oil is extracted from the kernels of wild apricots, which grows extensively in most parts of Kinnaur district. Though wild apricot grows in Shimla and Lahaul Spiti as well, it is primarily identified with Kinnaur. Similarly, kaala zeera, which is known to have medicinal and herbal value and fetches good prices, is grown in certain parts of Kinnaur.

Facts to know:

The biggest advantage of having a tag on a product is that no other person or place can claim to sell the products with the same name. The tag also helps ensure authenticity of the product, fetching genuine price for weavers, growers or anyone who is producing it.

The tag has helped prevent the sale of cheap factory-made shawls in Ludhiana which are sold as Kullu or Kinnauri shawls. Also the Industries Department has been involved in the exercise so that consumers know that they should only buy a product which has a GI logo.

“Yuva Navjeevan Board” to be chaired by the Chief Minister

In budget speech CM Jairam Thakur mentioned to establish Yuvanavjeevan board to ensure community participation in various departments. “I am of the firm opinion that these departments need to work in a close coordinated manner and work out a well thought out strategy; many departments viz Social Welfare, Police, Youth Services and Sports, Health and Excise and Taxation are working in this direction..” he said.

This Board will formulate effective strategies to prevent trafficking and consumption of narcotics, and for rehabilitation and de-addiction. The Board will also monitor the implementation of these policies and strategies.

Tourism initiatives in Budget 2019-20

1. Government started a new scheme “Nai Rahen – Nai Manzilen” during 2018-19 to promote tourism in the State. An outlay of Rs. 50 crore was kept for this scheme. It is now proposed to continue this scheme during 2019-20 with an outlay of Rs.50 crore.
2. “Shiv Dham” in Mandi district will be established with the dual objectives of promoting tourism and conserving religious heritage of the State. Replicas of 12 Jyotirlingas will be established at this site to attract tourists.
3. A “Light and Sound Show” at two sites in Shimla and another one in Kullu district, which will project the Dev Sanskriti of the State to encourage more tourists to visit the State and to learn about the local culture.
4. Government has also sent a proposal to the Government of India for starting water transport and other activities in Chamera, Kol Dam, Larji and Gobindsagar Lake.
5. Eco-Tourism Project at Janjehli District Mandi, Paragliding Destination in Bir-Billing District Kangra, Ski Destination at Chansal District Shimla and Larji Project District Kinnaur are being implemented in the first phase of “Nai Raahein Nai Manzilein” scheme.
6. The Government has also started a Joy Ride service from Manali-Rohtang-Manali for the facilitation of the tourists.

ECONOMY

GENERALISED SYSTEM OF PREFERENCES (GSP):

The U.S. should not terminate the **GSP programme** with India after the expiry of the 60-day notice period, a group of 25 influential American lawmakers urged the U.S. Trade Representative, warning that **companies seeking to expand their exports to India could be hit**.

What is Generalised System of Preferences (GSP)?

- The Generalized System of Preferences (GSP) is a U.S. trade program designed to promote economic growth in the developing world by providing **preferential duty-free entry for up to 4,800 products from 129 designated beneficiary countries and territories**.
- GSP was **instituted on January 1, 1976, by the Trade Act of 1974**.
- GSP has been given on **non-reciprocal basis** yet the US has linked it with market access and tariff reduction which is against the basic tenets of GSP.
- The objective of GSP was to give development support to poor countries by promoting exports from them into the developed countries. GSP promotes sustainable development in beneficiary countries by helping these countries to increase and diversify their trade with the United States.

Benefits of GSP:

- **Indian exporters benefit indirectly** – through the benefit that accrues to the importer by way of reduced tariff or duty free entry of eligible Indian products
- Reduction or removal of import duty on an Indian product makes it **more competitive** to the importer – other things (e.g. quality) being equal.
- This tariff preference **helps new exporters** to penetrate a market and established exporters to increase their market share and to improve upon the profit margins, in the donor country.

US Concern regarding GSP Continuation to developing countries:

- President Donald Trump's case on what he calls "**unequal tariffs**" from India rests on the trade relationship in favour of India: Indian exports to the U.S. in 2017-18 stood at \$47.9 billion, while imports were \$26.7 billion.
- Trump Administration has criticized India for a range of **unfair trading practices**– decision on data localisation for all companies operating in India, and the more recent tightening norms for FDI in e-commerce have aggravated the situation.
- **Sanitary and phytosanitary (SPS) barriers in India limit U.S. agricultural exports**.

What is the impact of GSP withdrawal on India?

India exports nearly 50 products of the 94 products on which GSP benefits are stopped. The GSP removal will leave a reasonable impact on India as the country enjoyed preferential tariff on exports worth of nearly \$ 5. 6 billion under the GSP route out of the total exports of \$48 bn in 2017-18.

Removal of GSP indicates a tough trade position by the US, especially for countries like India who benefited much from the scheme. India is the 11th largest trade surplus country for the US and India enjoyed an annual trade surplus of \$ 21 bn in 2017-18.

PEPSICO AND GUJARAT FARMERS ISSUE:

The multinational company has recently sued farmers in Gujarat for cultivating their proprietary FC5 variety of potatoes that are used to make Lay's chips. This variety is designed to have less moisture and sugar content than other spuds.

PepsiCo had also proposed to settle in the last court hearing on April 26.

The offer had two terms.

One, farmers should stop growing the registered potato variety and surrender their existing stocks. And if they wished to continue, they must enter PepsiCo's collaborative farming programme where they buy seeds from the company and sell the produce back to it.

PepsiCo India has agreed to withdraw its lawsuit against farmers. Now, farmer groups have urged the Gujarat government to not opt for an out-of-court settlement with PepsiCo as **the Protection of Plant Varieties & Farmers Rights (PPV&FR) Act 2001** lets farmers cultivate any variety they like to, including the patented variety of potatoes.

The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001:

- Enacted by India in 2001 adopting *sui generis* system.
- It is in conformity with **International Union for the Protection of New Varieties of Plants (UPOV), 1978**.
- The legislation recognizes the **contributions of both commercial plant breeders and farmers in plant breeding activity and also provides to implement TRIPs** in a way that supports the specific socio-economic interests of all the stakeholders including private, public sectors and research institutions, as well as resource-constrained farmers.

Objectives of the PPV & FR Act, 2001:

- To establish an effective system for the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants.
- To recognize and protect the rights of farmers in respect of their contributions made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties.
- To accelerate agricultural development in the country, protect plant breeders' rights; stimulate investment for research and development both in public & private sector for the development new of plant varieties.
- Facilitate the growth of seed industry in the country which will ensure the availability of high quality seeds and planting material to the farmers.

Rights under the Act:

Breeders' Rights: Breeders will have exclusive rights to produce, sell, market, distribute, import or export the protected variety. Breeder can appoint agent/ licensee and may exercise for civil remedy in case of infringement of rights.

Researchers' Rights: Researcher can use any of the registered variety under the Act for conducting experiment or research. This includes the use of a variety as an initial source of variety for the purpose of developing another variety but repeated use needs prior permission of the registered breeder.

Farmers' Rights:

- A farmer who has evolved or developed a new variety is entitled for registration and protection in like manner as a breeder of a variety;
- Farmers variety can also be registered as an extant variety;
- A farmer can save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under the PPV&FR Act, 2001 in the same manner as he was entitled before the coming into force of this Act provided farmer shall not be entitled to sell branded seed of a variety protected under the PPV&FR Act, 2001;
- Farmers are eligible for recognition and rewards for the conservation of Plant Genetic Resources of land races and wild relatives of economic plants;
- There is also a provision for compensation to the farmers for non-performance of variety under Section 39(2) of the Act, 2001 and

- Farmer shall not be liable to pay any fee in any proceeding before the Authority or Registrar or the Tribunal or the High Court under the Act.

PRE-PAID PAYMENT INSTRUMENTS:

Reserve Bank of India (RBI) has imposed a monetary penalty on five Pre-Paid Payment Instrument (PPI) issuers for violating its regulatory guidelines under provisions of **payment and settlement Systems act 2007**.

Background:

As per RBI directions, PPI issuers were required to complete the KYC process by February 28, 2019. PPIs or mobile wallets were mandated by the banking regulator in October 2017 to capture all information required under the know-your-customer (KYC) guidelines by end February.

About PPIs:

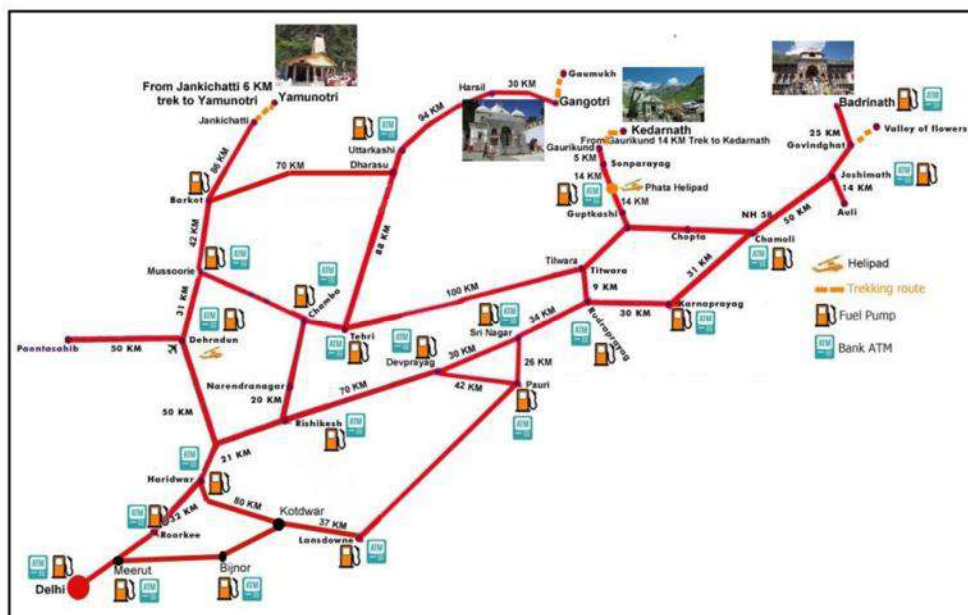
Prepaid payment instruments are those which **facilitate purchase of goods and services against the value stored on such instruments**. Value stored on them is paid by the holder using a medium (cash, debit card, credit card etc).

These are generally issued in the **form of smart cards, mobile wallets, paper vouchers, internet accounts/wallets**.

Features:

- Prepaid payment instruments (PPIs) come with **a pre-loaded value and in some cases a pre-defined purpose of payment**.
- They **facilitate the purchase of goods and services as well as inter-personal remittance transactions such as sending money to a friend or a family member**.
- These payment instruments are **licensed and regulated by the Reserve Bank of India**.
- There are three types of PPIs**—closed system PPIs, semi-closed system PPIs and open system PPIs.
- The most common example of a closed system PPI is a brand-specific gift card. Such cards, physical or otherwise, can be used only at specific locations, and cannot be used to transfer funds from one account to another.

CHARDHAM YATRA: Kedarnath portals open for public.



About Chardham project:

- The project involves developing and widening 900-km of national highways connecting the holy Hindu pilgrimage sites of; **Badrinath, Kedarnath, Gangotri, and Yamunotri** at an estimated cost of Rs.12,000 crores.
- The highway will be called Char Dham Mahamarg (Char Dham Highway) and the highway construction project will be called as Char Dham Mahamarg Vikas Pariyojana (Char Dham Highway Development Project).
- The roads will be widened from 12m to 24m and the project will involve construction of tunnels, bypasses, bridges, subways and viaducts.

7TH ECONOMIC CENSUS:

The **7th Economic Census -2019** is being **conducted by MoSPI** to provide disaggregated information on various operational and structural aspects of **all establishments in the country**.

Implementing agency: MoSPI has partnered with **Common Service Centres, CSC e-Governance Services India Limited, a Special Purpose Vehicle under the MEITY** as the implementing agency.

About Economic Censuses:

- **Launched** in 1976 as a plan scheme.
- **Coverage:** All entrepreneurial units in the country which are involved in any economic activities of either agricultural or non-agricultural sector which are engaged in production and/or distribution of goods and/or services not for the sole purpose of own consumption.
- **Objective:** It provides detailed information on operational and other characteristics such as number of establishments, number of persons employed, source of finance, type of ownership etc.
- **Significance:** This information used for micro level/ decentralized planning and to assess contribution of various sectors of the economy in the gross domestic product (GDP).
- Total **Six Economic Censuses (EC) have been conducted till date**. First one was conducted in 1977 by CSO

PAYMENT AND SETTLEMENT SYSTEMS IN INDIA: VISION 2019 - 2021:

The Reserve Bank of India (RBI) has released **this** vision document for safe, secure, quick and affordable e-payment system.

The core theme of the vision document is '**Empowering Exceptional (E) payment Experience**', that stresses on empowering every Indian to access a bunch of e-payment options safely and conveniently.

Highlights:

- It has **36 specific action points and 12 specific outcomes**.
- The main agenda of the vision document is the '**no-compromise**' approach towards safety and security of payment systems.
- It outlined the measures that the central bank will undertake to foster innovation, cybersecurity, financial inclusion, customer protection, and competition.

The vision document aims to achieve "a 'highly digital' and 'cash-lite' society through Goal Posts (4Cs):

1. Competition
2. Cost effectiveness
3. Convenience
4. Confidence

Key focus areas:

1. Boosting customer experience with robust grievance redressal
2. Empowering e-payment service providers
3. Enabling eco-system and infrastructure for the e-payment system
4. Putting down forward-looking regulations
5. Undertaking Risk-focused Supervision

Need:

- The RBI has highlighted the need for a self-regulatory organisation for the digital payment space, which can serve as a two-way communication channel between the players and the regulator.
- The number of digital transactions is expected to increase more than four times, from 20.69 billion in December 2018 to 87.07 billion in December 2021.
- The digital payment transaction turnover vis-a-vis gross domestic product (at current market prices) is expected to further increase to 10.37 per cent in 2019, 12.29 per cent in 2020, and 14.80 per cent in 2021.

Way ahead:

The RBI will implement the approach highlighted in the Vision document during the period 2019–2021. RBI's efforts will focus towards facilitating the operation of efficient and price-attractive payment systems. However, there will be minimal intervention of the RBI in fixing charges for customers to avail of digital payments

KERALA INFRASTRUCTURE INVESTMENT FUND BOARD ISSUED MASALA BONDS TO RAISE FUNDS FROM THE OVERSEAS MARKET.

What are Masala Bonds?

Masala Bonds are **rupee-denominated bonds** i.e the funds would be raised from overseas market in Indian rupees.

Eligibility: Any corporate, body corporate and Indian bank is eligible to issue Rupee denominated bonds overseas.

Limitations:

- RBI mandates that the money raised through such bonds cannot be used for real estate activities other than for development of integrated township or affordable housing projects.
- It also can't be used for investing in capital markets, purchase of land and on-lending to other entities for such activities as stated above.

Where can these bonds be issued and who can subscribe?

The Rupee denominated bonds can only be issued in a country and subscribed by a resident of such country that is a member of financial action task force and whose securities market regulator is a member of International Organisation of Securities Commission. While residents of such countries can subscribe to the bonds, it can also be subscribed by multilateral and regional financial institutions where India is a member country.

What is the minimum maturity of such bonds?

According to RBI, the minimum maturity period for Masala Bonds raised up to Rupee equivalent of USD 50 million in a financial year should be 3 years and for bonds raised above USD 50 million equivalent in INR per financial year should be 5 years. The conversion for such bonds will happen at the market rate on the date of settlement of transactions undertaken for issue and servicing of the bonds, including its redemption.

NEFT AND RTGS:

The RBI has proposed to examine the possibility of extending availability of **National Electronic Funds Transfer (NEFT)** round-the-clock on all the seven days of the week — 24×7 basis — to facilitate beyond the banking hour fund transfer. Besides, the central bank will also examine the possibility of extending the timings for **Real Time Gross Settlement (RTGS)** transactions.

What is NEFT?

- NEFT is an electronic funds transfer system maintained by the Reserve Bank of India (RBI). Started in November 2005, the setup was established and maintained by Institute for Development and Research in Banking Technology (IDRBT).
- NEFT enables bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis. It is done via electronic messages.
- Unlike Real-time gross settlement (RTGS), fund transfers through the NEFT system do not occur in **real-time basis**.

What is RTGS?

- RTGS are specialist funds transfer systems where the transfer of money or securities takes place from one bank to any other bank on a "real time" and on a "gross" basis.
- Settlement in "real time" means a payment transaction is not subjected to any waiting period, with transactions being settled as soon as they are processed.

COMMISSION TO LOOK INTO THE PROBLEMS FACED BY FARMERS:

The Meghalaya government has approved setting up of a commission to look into the problems faced by farmers.

The proposal was made by the Agriculture Department in line with the resolution passed at the '**farmers' parliament**'. The 'farmers' parliament', the first of its kind in the country, was organised in Meghalaya and attended by scientists, bureaucrats, apart from farmers, to discuss issues related to the agriculture situation in the State.






















SKIMMER DEVICES DETECTED IN THE DIFFERENT ATM KIOSKS IN VARIOUS PARTS OF INDIA:

What is a Skimmer?

A skimmer is a device designed to look like and replace the card insertion slot at an ATM. The skimmers, which cannot be usually spotted by an untrained eye, have circuitry that read and store the data on the magnetic strip of an ATM card even as the ATM processes the same data.

IAS | HAS | PCS | HCS

OUR PROUD FINAL SELECTIONS

 Saurabh Sahasrabudhe IAS Rank-124 (2017)	 Pradeep Choudhary (IAS-2013)	 Varun Khullar (IAS)	 Deepak Kumar (IAS-2016)	 Poonam Ranaut (HAS-2016) Rank-3	 Dulbir Singh (HCS)	 Neelharika Chaurhanda (PCS)	 Rajendra (PCS)	 Shayari Mathotra (PCS)	 Bhavana Handa (PCS)	 Rashika (HPSAS-ALIED)	 Kumar Singh (HPSAS-ALIED)
 PRIYA NAGTA RANK-3 (HAS) ROLL NO.11003796	 NISHA AZAD TEHSILDAR ROLL NO.11010093	 ARSHIYA SHARMA ETO ROLL NO.11010590	 VINOD KUMAR ETO ROLL NO.12001797	 ASHWANI KASHYAP ETO ROLL NO.11011880	 RISHAB KUMAR ETO ROLL NO.12000636	 SANJAY VERMA AUDIT INSPECTOR (CO-OP SOCIETY)	 KANWAR YUDHBIR SINGH AUDIT INSPECTOR (CO-OP SOCIETY)	 UMESH SARAO AUDIT INSPECTOR (CO-OP SOCIETY)			

ENVIRONMENT ECOLOGY

GOLDMAN ENVIRONMENTAL PRIZE:

Six grassroots environmental has been awarded the prestigious Goldman Environmental Prize.

This year marks the 30th anniversary of the Prize founded in 1989 by U.S. philanthropists Rhoda and Richard Goldman. To date, 194 winners from 89 different nations have received this award.

- It *honors grassroots environmental heroes from the world's six inhabited continental regions: Africa, Asia, Europe, Islands & Island Nations, North America, and South & Central America.*
- The *Prize recognizes individuals for sustained and significant efforts to protect and enhance the natural environment, often at great personal risk.*
- *As per the Goldman Prize grassroots leaders as those* involved in local efforts, where positive change is created through community or citizen participation in the issues that affect them. Through recognizing these individual leaders, the Prize seeks to inspire other ordinary people to take extraordinary actions to protect the natural world.

The Goldman Prize amplifies the voices of these grassroots leaders and provides them with:

- International recognition that enhances their credibility.
- Worldwide visibility for the issues they champion.
- Financial support to pursue their vision of a renewed and protected environment.

NAMAMI GANGE PROGRAMME:

Commissioning of sewage treatment plants (STP) and laying sewer lines are at the heart of the mission to clean the Ganga. Nearly Rs. 23,000 crore has been sanctioned of the Rs. 28,000 crore outlay for sewage management work. River-front development, cleaning ghats and removing trash from the river — the cosmetic side of the mission — make up about for Rs. 1,200 crore of the mission outlay.

Namami Gange Programme:

Namami Gange Programme – is an umbrella programme which *integrates previous and currently ongoing initiatives by enhancing efficiency, extracting synergies and supplementing them with more comprehensive & better coordinated interventions.* Government of India is supplementing the efforts of the state governments in addressing the pollution of river Ganga by providing financial assistance to the states.

- **Need:** Each day, more than 500 million liters of wastewater from industrial sources are dumped directly into Ganga. In many places, this wastewater entering the rivers is completely raw, completely untreated.

Main Pillars of the Namami Gange Programme are:

- Sewerage Treatment Infrastructure
- River-Surface Cleaning
- Afforestation
- Industrial Effluent Monitoring
- River-Front Development
- Bio-Diversity
- Public Awareness
- Ganga Gram

Its implementation has been divided into:

1. Entry-Level Activities (for immediate visible impact),
2. Medium-Term Activities (to be implemented within 5 years of time frame) and
3. Long-Term Activities (to be implemented within 10 years).

A NATIONAL CLIMATE EMERGENCY HAS BEEN DECLARED BY THE UK PARLIAMENT. THE UK IS THE FIRST NATIONAL GOVERNMENT TO DECLARE SUCH AN EMERGENCY.

However this proposal ***does not legally compel the government to act***, was approved without a vote.

What is a climate emergency?

There is no single definition of what that means but many local areas say they want to be ***carbon-neutral by 2030***. It's a much more ambitious target than the UK governments, which is to reduce carbon emissions by 80% (compared to 1990 levels) by 2050.

Why declare an emergency?

The United Nations says we could have just 11 years left to limit a climate change catastrophe. It's not just about reducing carbon emissions on a local scale, but also raising awareness about climate change and trying to convince MPs so that changes can be made.

The national government needs to declare an emergency and put resources in place to enable councils to help reduce carbon emissions. It's the first step to radical action.

Way ahead:

With the planet to experience further warming from the heat held by the oceans, there is increasing international focus on meeting the United Nation's Paris Agreement which was signed by 197 countries in 2016. This ground-breaking agreement has the ambitious global **aim of preventing global temperatures from reaching 2°C above pre-industrial levels (the late nineteenth century) by 2100**, and ideally should be no more than 1.5°C.

A report by the Intergovernmental Panel on Climate Change (the IPCC) has suggested that meeting this target means annual global carbon emissions must effectively halve between now and 2030, and then fall to zero by 2050. This is a target the UK opposition party Labour are now calling for.

ARSENIC IN GROUNDWATER:

Arsenic is toxic to almost all life forms, but now researchers at the University of Washington have discovered that some microbes in the Pacific Ocean not only tolerate the stuff, but actively breathe it. The discovery has implications for how life may adapt to a changing climate, as well as where we might find it on other planets.

Arsenic in ground water is a ***geogenic contaminant*** i.e. caused by natural geologic processes.

Concerns: Incidence of high arsenic in groundwater reported from various parts of the country, particularly in the Ganga- plains is a serious threat to the health of human being.

Arsenic occurrences in ground water in these areas is highly sporadic in nature and all the sources in these areas are not necessarily contaminated.

Key facts:

- Arsenic is naturally present at high levels in the groundwater of a number of countries.
- Arsenic is highly toxic in its inorganic form.
- Contaminated water used for drinking, food preparation and irrigation of food crops poses the greatest threat to public health from arsenic.

- Long-term exposure to arsenic from drinking-water and food can cause cancer and skin lesions. It has also been associated with cardiovascular disease and diabetes. In utero and early childhood exposure has been linked to negative impacts on cognitive development and increased deaths in young adults.

Measures:

Technological options to combat arsenic menace, in groundwater, to ensure supply of arsenic free water, in the affected areas can be in-situ remediation of arsenic from aquifer system, ex-situ remediation of arsenic from tapped groundwater by arsenic removal technologies, use of surface water source as an alternative to the contaminated groundwater source, tapping alternate safe aquifers for supply of arsenic free groundwater or combination of above techniques.

What's the difference between organic arsenic and inorganic arsenic?

Atoms of arsenic bond with other elements to form molecules — if carbon is one of these elements, then the arsenic compound is an organic compound. If there is no carbon present, then the arsenic compound is in an inorganic compound.

Inorganic arsenic is a known human carcinogen — it is this form of arsenic that is linked with increased risks of cancer and other health effects.

LAST CAPTIVE WHITE TIGER:

The last captive white tiger named Bajirao died recently at Sanjay Gandhi National Park, Mumbai.

- The tiger was born at National Park in 2001.
- White tigers are **not a separate sub species of Tiger**. The White colour is basically due to a pigmentation. The White colour is due to lack of red or yellow **pheomelanin pigment** and the presence of unique recessive genes.
- White tigers were once found in Madhya Pradesh, Assam, West Bengal, Bihar.
- Now there are no white tigers in the wild.
- **The last white tiger reported in wild was captured in Rewa forest Madhya Pradesh.**
- **Sanjay Gandhi National Park is in Maharashtra.** It is located in Mumbai. It has a protected archaeological site called Kanheri caves.

FALL ARMYWORM:

First reported in India last year, the **Fall Armyworm (FAW) or Spodoptera frugiperda** has become a major problem for farmers this year, with the pest hitting the production of the crop.

Concerns:

- More than 50% of the country, including Mizoram, has reported cases of FAW infestation this year.
- Ahead of the new kharif season, FAW poses a serious challenge before farmers due to lack of knowledge about the pest and lack of clarity on how to tackle it.
- If these problems are not addressed urgently, vast tracts of crops can be laid to waste by this pest.

About FAW?

A native of **the tropical and sub-tropical regions of the Americas**, FAW was first detected in the African continent in 2016. Since then, it has spread to other countries such as China, Thailand, Malaysia and Sri Lanka.

In India: It was reported in India for the first time last year, when it affected crops in Karnataka. Within a span of only six months, almost 50 per cent of the country, including Mizoram, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Gujarat and West Bengal, has reported FAW infestations.

In its 45-day-long lifecycle, the female moth of this pest lays around 1,500-2,000 eggs on the top of leaves. In the roughly 30-day larval stage, the caterpillar goes through six stages of development or instars.

This is the most dangerous part of the lifecycle as the caterpillar feeds on leaves, whorls, stalks and flowers of crop plants. Once this stage is completed, the growing moth pupates in the soil — for 8-9 days in summer and 20-30 days in cold weather. The nocturnal egg-laying adults live for about 10 days, during which they migrate long distances.

- It is the **polyphagous** (ability to feed on different kinds of food) nature of the caterpillar and **the ability of the adult moth to fly more than 100 km per night**.
- Given its ability to feed on multiple crops— nearly 80 different crops ranging from maize to sugarcane— FAW can attack multiple crops.
- Similarly, it can spread across large tracts of land as it can fly over large distances. This explains the quick spread of the pest across India.

How FAW affects output?

- Till date, India has reported FAW infestation on maize, sorghum (jowar) and sugarcane crops. Maize has been the worst affected as most maize-growing states in southern India have been affected by the pest.
- FAW infestation and drought has led to a shortfall of nearly 5 lakh tonnes in output, prompting the central government to allow import of maize under concessional duty. Maize is the third most important cereal crop grown in the country and the infestation, if not checked in time, can wreck havoc.

Way ahead:

Most entomologists have suggested the **Integrated Pest Management system** to control the pest. This would involve constant surveillance of the pest during its vegetative growth phase and taking measures like mechanically destroying the egg masses and using pheromone traps to catch the insects. Pheromone traps are devices which are used to attract male insects by luring them with female pheromones. Farmers should also be discouraged from taking up staggered sowing, as this would allow the pest to have multiple reservations for growth

THE FIRST-EVER GLOBAL ASSESSMENT REPORT ON BIODIVERSITY AND ECOSYSTEM SERVICES BY INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES (IPBES) HAS BEEN RELEASED.

The Global Assessment Report on Biodiversity and Ecosystem Services is termed as the first-ever such comprehensive report. It took three years for a group of 145 expert authors from 50 countries to prepare this report based on more than 15,000 scientific and government documents. It primarily looked or analysed the impact of economic development on nature and ecosystems.

Key findings of the report:

- **Nature is declining globally at rates unprecedented in human history** — and the rate of species extinctions is accelerating with grave impacts on people around the world now likely,
- **One million animal and plant species are under extinction**. More to it, thousands of these would extinct within decades.
- Since the beginning of the last century (1900), availability of native species in most of the land-based habitats has declined by 20 per cent. Similarly, 40 per cent of the amphibian species are threatened with extinction.

- If one tracks back extinction of species to the 16th century, 680 vertebrate species have been pushed into extinction since then, while 9 per cent of all domesticated breeds of mammals used for food and agriculture went extinct by 2016. Add to it, 1,000 more such breeds are under threat of extinction.
- Almost 33 per cent of reef-forming corals and more than a third of all marine mammals are threatened. Ecosystems, species, wild populations, local varieties and breeds of domesticated plants and animals are shrinking, deteriorating or vanishing. The essential, interconnected web of life on Earth is getting smaller and increasingly frayed.
- **Reasons:** This loss is a direct result of human activity and constitutes a direct threat to human well-being in all regions of the world.
- **Human-induced loss in ecosystems:** Three-quarters of the land-based environment and about two-thirds of the marine environment have been significantly altered by human actions, says the assessment. Nearly 75 per cent of all freshwater resources are now used for crop and livestock rearing activities.
- **Impacts:** productivity in 23 per cent of global land has reduced due to land degradation. Up to \$577 billion in annual global crops are at risk from pollinator loss and 100-300 million people are at increased risk of floods and hurricanes because of loss of coastal habitats and protection.

What is IPBES?

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body, established by member States in 2012. The objective of IPBES is to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.

The work of IPBES can be broadly grouped into four complementary areas:

Assessments: On specific themes (e.g. "Pollinators, Pollination and Food Production"); methodological issues (e.g. "Scenarios and Modelling"); and at both the regional and global levels (e.g. "Global Assessment of Biodiversity and Ecosystem Services").

Policy Support: Identifying policy-relevant tools and methodologies, facilitating their use, and catalyzing their further development.

Building Capacity & Knowledge: Identifying and meeting the priority capacity, knowledge and data needs of our member States, experts and stakeholders.

KALASA- BANDURI PROJECT:

Karnataka Neeravari Nigam Ltd., which is executing **the Kalasa-Banduri project** worth nearly Rs. 850 crore, has claimed that the drinking water project is out of the purview of **Environment Impact Assessment (EIA)**.

About Kalasa- Banduri project:

- The Kalasa-Banduri Nala is a project undertaken by the Government of Karnataka to improve drinking water supply to the Districts of Belagavi, Dharwad and Gadag.
- It involves building across Kalasa and Banduri, two tributaries of **the Mahadayi River** to divert 7.56 TMC of water to the Malaprabha River, which supplies the drinking water needs of the districts.

About EIA:

Environment Impact Assessment (EIA) is a formal process used to predict the environmental consequences of any development project. Environment Impact Assessment in India is statutory backed by **the Environment Protection Act in 1986**, which contains various provisions on EIA methodology and process.

Rationale behind EIA: EIA looks into various problems, conflicts and natural resource constraints which may not only affect the viability of a project but also predict if a project might harm to the people, their land,

livelihoods and environment. Once these potential harmful impacts are predicted, the EIA process identifies the measures to minimize those impacts.

The objective of the EIA is to: Identify the environmental, social and economic impacts of a project prior to taking a decision on its implementation. Mitigation of harmful impacts and maximizes the beneficial effects.

Once the assessment is complete, the EIA findings are communicated to all stakeholders viz. developers, investors, regulators, planners, politicians, affected communities etc. On the basis of the conclusion of EIA process, the government can decide if a project should be given environment clearance or not. The developers and investors can also shape the project in such a way that its harms can be mitigated and benefits can be maximized.

PURPLE FROG:

Purple frog could be soon designated as Kerala's state amphibian. There is a proposal on this.



About Purple Frog:

- Also known as **Maveli frog or Pignose Frog**.
- It is relatively round in shape as compared to other flattened frogs. Compared to other frogs it has a small head and an unusual pointed snout (muzzle).
- In most cases adults are dark purplish-grey in color.
- For almost its entire life it lives in underground tunnels and comes out to surface for only a single day in a year to breed.
- **Distribution:** They were thought to be limited to south of the Palghat Gap (a pass which is located between Nilgiri Hills to north and Anaimalai Hills to south) in Western Ghats, but are now known to be quite widely distributed in Western Ghats.
- The frog should rightly be called '**living fossil**' as it is believed that they have co-existed with dinosaurs almost 70 million years ago.
- IUCN Red List: Their conservation status is **endangered** as per International Union for Conservation of Nature (IUCN).

GRIZZLED GIANT SQUIRREL:

For the first time, researchers have sighted nests of the grizzled giant squirrel at **Pakkamalai Reserve Forests** near Gingee in the Eastern Ghats.

- The grizzled giant squirrel is usually known to nest in the Western Ghats in Southern India ranging from Chinnar Wildlife sanctuary in Kerala to Anamalai Tiger Reserve and Palani hills in Tamil Nadu.
- It has been categorised as **near threatened** by the Red List and listed under Schedule II of **CITES**.
- It is listed under **Schedule I of the Wildlife Protection Act, 1972**

THE WORLD MIGRATORY BIRD DAY (WMBD) 2019 IS BEING OBSERVED ON 11 MAY 2019.

It helps to raise global awareness about threats faced by migratory birds, their ecological importance, and need for international cooperation to conserve them.

The **first WMBD was celebrated in 2006.**

- **Organized By:** The Convention on Migratory Species (CMS), the African-Eurasian Waterbird Agreement (AEWA) together with Environment for the Americas (EFTA).
- **Theme:** "Protect Birds: Be the Solution to Plastic Pollution!".
- On 26 October 2017 in the margins of the CMS COP12 in Manila, Environment for the Americas (EFTA), the Convention on Migratory Species (CMS) and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), announced an innovative partnership to increase awareness of the plight of migratory birds around the world.
- The new partnership formally unites two of the world's largest bird education campaigns, International Migratory Bird Day (IMBD) and World Migratory Bird Day (WMBD) in a bid to strengthen global recognition and appreciation of migratory birds and highlight the urgent need for their conservation.
- Starting in 2018, the new joint campaign adopts the single name of "World Migratory Bird Day" and major events to celebrate the day will be organized twice a year, on the second Saturday in May and in October.

About CMS:

In order to protect the migratory species throughout their range countries, a Convention on Conservation of Migratory Species (CMS), has been in force, **under the aegis of United Nations Environment Programme.**

Also referred to as the **Bonn Convention**, it provides a global platform for the conservation and sustainable use of migratory animals and their habitats and brings together the States through which migratory animals pass, the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.

Classification of species: Under this convention, migratory species threatened with extinction are listed on Appendix I and Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them. Migratory species that need or would significantly benefit from international co-operation are listed in Appendix II of the Convention.

CMS is **the only global and UN-based intergovernmental organization established exclusively for conservation and management of terrestrial, aquatic and avian migratory species throughout their range.**

What are migratory species? Why protect them?

Migratory species are those animals that move from one habitat to another during different times of the year, due to various factors such as food, sunlight, temperature, climate, etc.

The movement between habitats can sometimes exceed thousands of miles/kilometres for some migratory birds and mammals. A migratory route can involve nesting and also requires the availability of habitats before and after each migration.

New species of reddish-brown pit viper from Arunachal Pradesh:

- This discovery of new species makes **Arunachal Pradesh only Indian state to have a pit viper named after it.**
- Scientific Name: *Trimeresurus arunachalensis*.

- With this, **India is now home to fifth brown pit viper**. The other four brown pit vipers are Hump-Nosed, Horseshoe, Malabar, and Himalayan.
- This new discovery makes **Arunachal pit viper the second serpent to have been discovered in state after Crying Keelback**, a non-venomous snake was found in Arunachal's Lepa-Rada district in 2018.

BARN OWLS:

With a thriving rat population playing havoc with its coconut yield, the UT of Lakshadweep hires **barn owls** for help.

- The reason is that the rats in the Lakshadweep Islands practically live on treetops. The coconut palms here grow so close together that they resemble a jungle. The fronds overlap, allowing the rodents to move easily from one tree to another.
- Besides, the nocturnal barn owls are natural rat hunters, armed with a powerful auditory mechanism. There is also an important environmental angle to Lakshadweep's decision to choose biocontrol.
- The islands being a designated organic zone, use of chemicals for pest control is a strict no-no.

CHILIKA LAKE:

The extremely severe cyclone, Fani, has created four new mouths in Chilika Lake, Asia's largest brackish water lake, connecting to Bay of Bengal. Chilika lagoon had only two active mouths — the point where it meets the sea before Fani hit the Odisha coast on May 3. Four new mouths have opened due to wave energy with high tidal prism.

About Chilika Lagoon:

- It is the largest coastal lagoon in India and the second largest lagoon in the world after The New Caledonian barrier reef in New Caledonia.
- It is the largest wintering ground for migratory waterfowl found anywhere on the Indian sub-continent.
- It is one of the hotspot of biodiversity in the country, and some rare, vulnerable and endangered species listed in the IUCN Red List of threatened Animals inhabit in the lagoon for atleast part of their life cycle.
- On account of its rich bio-diversity and ecological significance, Chilika was designated as the 1st "Ramsar Site" of India.
- The Nalaban Island within the lagoon is notified as a Bird Sanctuary under Wildlife (Protection) Act, the National Wetlands, mangroves and coral reefs Committee of Ministry of Environment & Forests, Government of India, have also identified the lagoon as a priority site for conservation and management.
- Chilika Lagoon lies in the districts of Puri, Khurda and Ganjam of Odisha State along the eastern coast of India. It is well connected to the Chennai and Kolkata through National Highway No 5, and the Chennai Kolkata rail line passes along the western bank of the Lagoon Balugaon, with Balugaon, Chilika and Rambha being the main stations along the Western shoreline of the lagoon.

HERBIVORE CENSUS IN GIR FOREST:

Every summer, the Forest Department of Gujarat conducts a Herbivore Census in Gir forest. This year's exercise is of particular significance because **it is the last Herbivore Census ahead of next year's Lion Census, which is a once-in-five-years exercise**.

Coverage: The **Herbivore Census covers** ungulates such as spotted deer, blue bulls (nilgais), sambars, Indian gazelles (chinkaras), four-horned antelopes (choshinga) and wild boars, as well as Indian langurs and peafowl.

Importance: Wild ungulates and langurs are the main prey of Asiatic lions, the endangered species whose only wild population in the world is surviving in the 22,000 sq km Greater Gir area. A count provides a sense of the available of the prey base for lions as well as other predators like leopards, hyenas and wolves. A strong prey base can reduce depredation of livestock by lions and can reduce man-animal conflict.

In 2013-14, the last Herbivore Census before the previous Lion Census, the total count of all herbivores was 1.32 lakh, higher than the about 1.25 lakh counted in 2012-13.

Why it's done in summer? During summer, foliage is reduced to a minimum in dry and deciduous tropical forests, which affords the best visibility for conducting a census. Also, wild animals concentrate around water points, which in Gir include 450 artificial ones filled by the Forest Department.

Trends noticed so far:

Since 1974, the population of herbivorous in Gir forest has been on the rise. In 2013, the population of ungulates was estimated to be 1,26,893 or 76.49 animals per square kilometres. That translates to 8000 kg of biomass available to carnivorous, very close to the levels in Serengeti National Park in Tanzania. The population of ungulates was 1,07,172 in 2010. Incidentally, lion census is due in May next year.

LECANORCHIS TAIWANIANA:

- It is a type of orchid that was recently discovered in Assam. This is the **first time it is discovered in India**.
- The orchid species is already known in Japan, Taiwan, and Laos.
- It is one of two known types of parasitic plants which have **abandoned photosynthesis**.
- It **derives nutrients and its energy from fungus**.
- It is India's one of **smallest botanically recorded orchids** in terms of size and duration of bloom.
- **Background:** India has about 1,300 species of orchids.

SASAKAWA AWARD:

The United Nations Office for Disaster Risk Reduction (UNDRR) has honoured Dr Pramod Kumar Mishra, Additional Principal Secretary to Prime Minister Narendra Modi, with the 'Sasakawa Award 2019 for Disaster Risk Reduction'.

- The Sasakawa Award is the most prestigious award of the United Nations in the area of Disaster Risk Management.
- Instituted 30 years back, the award is jointly organised by the United Nations Office for Disaster Risk Reduction (UNDRR) and the Nippon Foundation.
- The winners of the award can be either organisations or individuals who are bestowed with a grant of USD 50000 as the award prize.

SCIENCE AND TECHNOLOGY

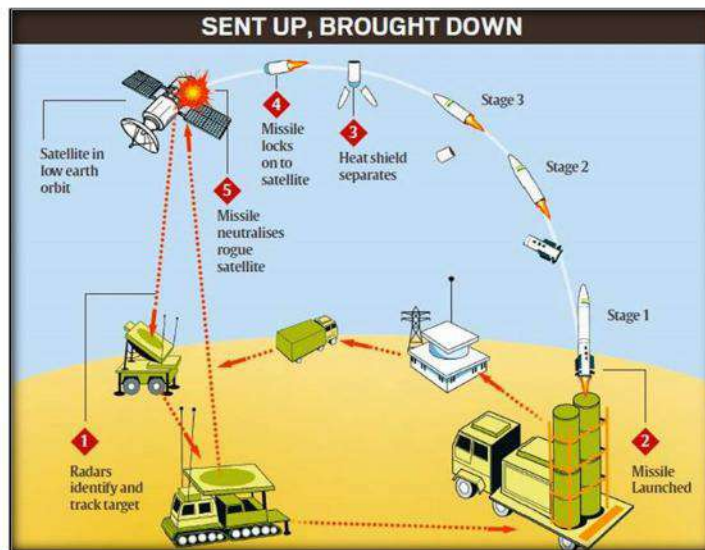
MISSION SHAKTI:

The joint programme of the Defence Research and Development Organisation (DRDO) and the Indian Space Research Organisation (ISRO).

As part of the mission, an anti-satellite (A-SAT) weapon was launched and targeted an Indian satellite which had been decommissioned.

Mission Shakti was carried out from DRDO's testing range in Odisha's Balasore.

Significance:



India is only the 4th country to acquire such a specialised and modern capability and Entire effort is indigenous. Till now, only the US, Russia and China had the capability to hit a live target in space.

The test was done to verify that India has the capability to safeguard our space assets. It is the Government of India's responsibility to defend the country's interests in outer space.

India has a long standing and rapidly growing space programme. It has expanded rapidly in the last five years. The Mangalyaan Mission to Mars was successfully launched. Thereafter, the government has sanctioned the Gaganyaan Mission which will take Indians to outer space.

India has undertaken more than 100 spacecraft missions consisting of communication satellites, earth observation satellites, experimental satellites, navigation satellites, apart from satellites meant for scientific research and exploration, academic studies and other small satellites. India's space programme is a critical backbone of India's security, economic and social infrastructure.

INDIA IS PLANNING TO LAUNCH ITS LATEST RADAR IMAGING SATELLITE RISAT 2BR1 TOWARDS THE END OF MAY 2019 ON BOARD PSLV-C46.

About RISAT:

The RISAT, was first deployed in orbit on April 20, 2009 as the RISAT-2, to provide Indian forces with **all-weather surveillance and observation**, which are crucial to notice any potential threat or malicious activity around the nation's borders.

Following the 2008 Mumbai terror attacks, the launch of RISAT-2 was prioritised over RISAT- 1.

The to-be-deployed RISAT-2BR1 satellite uses the same **SAR band {as used in RISAT-2}** and will further **improve India's imaging reconnaissance abilities**. {more details in next month issue}

CRISPR ANTI-VENOM:

Antidote to world's most venomous sting made with gene editing.

Chironex fleckeri is among the deadliest box jellyfish species, with an explosive sting that causes cardiac arrest in humans. Scientists are still unsure exactly how its venom works. But a team of researchers has

managed to develop an antidote to block its venom using the powerful gene-editing tool CRISPR. The drug, **cyclodextrin**, is already tested safe for humans, cheap and readily available.

What are Genes and what is gene- editing?

Genes contain the bio-information that defines any individual. Physical attributes like height, skin or hair colour, more subtle features and even behavioural traits can be attributed to information encoded in the genetic material.

An ability to alter this information gives scientists the power to control some of these features. Gene “editing” — sometimes expressed in related, but not always equivalent, terms like genetic modification, genetic manipulation or genetic engineering — is not new.

What is CRISPR-Cas9?

The clustered, regularly interspaced, short palindromic repeats, or CRISPR/CRISPR-associated protein 9 (Cas9) (CRISPR-Cas9) system has revolutionised genetic manipulations and made gene editing simpler, faster and easily accessible to most laboratories.

CRISPR technology is basically a gene-editing technology that can be used for the purpose of altering genetic expression or changing the genome of an organism.

- The technology can be used for targeting specific stretches of an entire genetic code or editing the DNA at particular locations.
- CRISPR technology is a simple yet powerful tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function.
- Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops. However, its promise also raises ethical concerns.

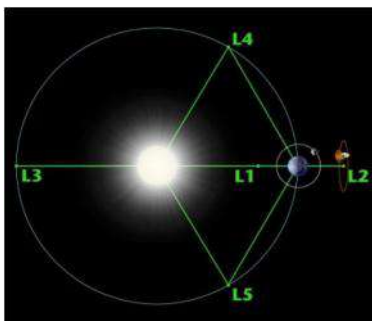
How it Crispr-Cas9 works

CRISPR-Cas9 technology behaves like a cut-and-paste mechanism on DNA strands that contain genetic information.

- The specific location of the genetic codes that need to be changed, or “edited”, is identified on the DNA strand, and then, using the Cas9 protein, which acts like a pair of scissors, that location is cut off from the strand. A DNA strand, when broken, has a natural tendency to repair itself.
- Scientists intervene during this auto-repair process, supplying the desired sequence of genetic codes that binds itself with the broken DNA strand.

THE INDIAN SPACE RESEARCH ORGANIZATION IS PLANNING TO LAUNCH ADITYA-L1 MISSION TO STUDY THE SUN EARLY IN 2020.

About Aditya- L1 mission:



It is **India's first solar mission**.

Objectives: It will study the sun's outer most layers, the corona and the chromospheres and collect data about coronal mass ejection, which will also yield information for space weather prediction.

Significance of the mission: The data from Aditya mission will be immensely helpful in discriminating between different models for the origin of solar storms and also for constraining how the storms evolve and what path they take through the interplanetary space from the Sun to the Earth.

Position of the satellite: In order to get the best science from the sun, continuous viewing of the sun is preferred without any occultation/ eclipses and hence, Aditya- L1 satellite will be placed in the halo orbit around the Lagrangian point 1 (L1) of the sun-earth system.

What are Lagrangian points and halo orbit?

Lagrangian points are **the locations in space where the combined gravitational pull of two large masses roughly balance each other**. Any small mass placed at that location will remain at constant distances relative to the large masses. **There are five such points in Sun-Earth system** and they are denoted as L1, L2, L3, L4 and L5. A halo orbit is a periodic three-dimensional orbit near the L1, L2 or L3.

BISPHENOL-A (BPA):

The use of bisphenol-A (BPA) is prohibited in feeding bottles for babies, but the toxic chemical continues to be found in some bottles and cups for babies sold in the Indian market, and is leaching into baby foods, found a recent study conducted by Toxics Link.

BPA is an endocrine-disrupting chemical that has been accepted as the "chemical of concern" globally, and countries have taken action to phase it out from products. The toxic chemical is known to mimic a hormone in the body which activates the progression of cancer and interferes with the development of the reproductive system.

Effects: Epidemiological studies of children indicate correlations between BPA exposure and heart diseases, liver toxicity, and metabolic syndrome (diabetes obesity).

EL NINO:

El Niños have become stronger and their pattern too has been changing, the world's first 400-year-long seasonal record of El Niño created by Australian scientists has revealed. Traditional El Niño events have also become more intense in nature.

The El Niño trends of the past have been studied on the basis of **coral cores** spanning the Pacific Ocean. It was made possible because **coral cores — like tree rings —** have centuries-long growth patterns and contain isotopes that can tell us a lot about the climate of the past. Hence, the key to unlocking the El Niño record was understanding that coral records contained enough information to identify seasonal changes in the tropical Pacific Ocean.

Key findings:

- The trend of El Niño in the last four centuries shows a variation in El Niño types. There has been a simultaneous increase in central Pacific events and a decrease in eastern Pacific ones since the late twentieth century.
- This leads to a ratio of central to eastern Pacific events that is unusual in a multi-century context. Compared to the past four centuries, the most recent 30-year period includes fewer, but more intense, eastern Pacific El Niño events.
- There has been an unprecedented increase in the number of El Niños forming in the central Pacific over the past 30 years, compared to all 30-year periods in the past 400 years.
- At the same time, the stronger eastern Pacific El Niños were the most intense El Niño events ever recorded, according to both, the 100-year-long instrumental record and the 400-year-long coral record.

Significance:

An understanding of El Niños in the past and present based on this four-century-old trend needs to be explored further by India for modelling, predicting and planning for future El Niños and their wide-ranging impacts.

What is ENSO?

ENSO stands for El Niño Southern Oscillation, it is an irregular periodic variation of wind and sea surface temperature that occurs over the tropical eastern Pacific Ocean. ENSO affects the tropics (the regions surrounding the equator) and the subtropics (the regions adjacent to or bordering the tropics). The warming phase of ENSO is called El Niño, while the cooling phase is known as La Niña.

What is El Niño?

El Niño is a climatic cycle characterised by high air pressure in the Western Pacific and low air pressure in the eastern. In normal conditions, strong trade winds travel from east to west across the tropical Pacific, pushing the warm surface waters towards the western Pacific. The surface temperature could witness an increase of 8 degrees Celsius in Asian waters. At the same time, cooler waters rise up towards the surface in the eastern Pacific on the coasts of Ecuador, Peru, and Chile. This process called upwelling aids in the development of a rich ecosystem.

What causes El Niño?

El Niño sets in when there is anomaly in the pattern. The westward-blowing trade winds weaken along the Equator and due to changes in air pressure, the surface water moves eastwards to the coast of northern South America. The central and eastern Pacific regions warm up for over six months and result in an El Niño condition. The temperature of the water could rise up to 10 degrees Fahrenheit above normal. Warmer surface waters increase precipitation and bring above-normal rainfall in South America, and droughts to Indonesia and Australia.

SINGAPORE RECENTLY REPORTED THE FIRST EVER CASE OF THE MONKEYPOX VIRUS, A RARE VIRUS SIMILAR TO THE HUMAN SMALLPOX.

About Monkeypox Virus:

- Monkeypox virus (MPXV) is an **orthopoxvirus** that causes a viral disease with symptoms in humans similar, but milder, to those seen in smallpox patients.
- Smallpox was declared eradicated in 1980, whereas **human monkeypox is endemic in villages of Central and West Africa**.
- The **occurrence of cases is often found close to tropical rainforests** where there is frequent contact with infected animals.
- There is **no evidence to date that person-to-person transmission alone can sustain monkeypox in the human population**.

Transmission: Monkeypox is a viral zoonosis, i.e. a disease transmitted from animals to humans. It can be transmitted through contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals. Human infections have been documented through the handling of infected monkeys, Gambian giant rats and squirrels, with rodents being the most likely reservoir of the virus.

Treatment: As of now, there is no specific treatment or vaccine available for monkeypox infection. The patient is generally treated in isolation by doctors.

DEPARTMENT OF BIOTECHNOLOGY (DBT) HAS LAUNCHED MANAV:

Human Atlas Initiative, towards improving knowledge on human physiology.

MANAV: Human Atlas Initiative

- It is **a project funded by DBT**.
- Aims at creating **a database network of all tissues in the human body** from the available scientific literature.
- It is a project that **involves scientific skill development for annotation, science outreach along with handling big data**.
- The programme will **involve gaining better biological insights through physiological and molecular mapping, develop disease models through predictive computing and have a wholistic analysis and finally drug discovery**.

Who can participate in this project?

- The project can be signed up by students who are in their final year graduation and above. Students from the fields of biochemistry, biotechnology, microbiology, botany, zoology, bioinformatics, health sciences, systems biologists, pharmacologists and data sciences can associate with this project.
- Even participants having a science background but not necessarily involved in active scientific research can be part of this network.

Importance of MANAV

- So far, researchers and students have had little or no expertise in reading scientific literature and develop or build further information on the same. This platform will impart key skills to the student community to read classified scientific literature, in this case, on individual tissue-basis, and perform annotation and curation.
- Since all the information generated will pass through multiple levels of reviews, it will be an Atlas or a reliable collection on human body tissues. This collated data can be useful for both future researchers and parallelly, to the clinicians and drug developers, who finally handle human bodies in disease conditions.

What are the applications of information generated through MANAV?

The aim of the project remains to **understand and capture the human physiology in two stages – in a normal stage and while in a disease stage**. Such a database on individual tissues, once ready, can come handy in tracing the causes of a disease, understanding specific pathways and ultimately decode the body's disease stage linked to tissues and cells. The teams will also study any potent elements or molecules that have never been used in the form of drugs, to target the specific cells or tissues

THE SCIENTISTS FROM CSIR-CENTRE FOR CELLULAR AND MOLECULAR BIOLOGY, HYDERABAD HAS SEQUENCED FOR THE FIRST TIME, THE ENTIRE GENOME OF ASIATIC LION.

The objective is **to understand the species at DNA level and study if there are any specific problems with regard to adaptability to environment or behaviour vis-à-vis other big cats**.

Need and significance:

This firsthand information would help researchers to better **understand the evolution of Asiatic lions and also make possible comparative analysis with other big cats**.

The genome sequencing would enable scientists *to develop specific markers to study population genetics (the differences at the gene level within a population) and get newer insights into its population status and subsequent management.*

The study will *enable better disease and population management of the endangered big cat by identifying characteristics which are specific to Asiatic lions.*

About Asiatic Lion:

- IUCN Red List Status: Endangered
- Listed in Schedule I of Wildlife (Protection) Act 1972, in Appendix I of Convention on International Trade in Endangered Species (CITES).
- At present the only home of Asiatic lion is Gir National Park and Wildlife Sanctuary in Gujarat.
- The population of the endangered Asiatic lion is very low — only 523 animals are present in the Gir forests.

YUVA VIGYANI KARYAKRAM:

Launched by *Indian Space Research Organisation.*

It is a special *programme for School Children*, in tune with the Government's vision "Jai Vigyan, Jai Anusandhan".

Aim: The Program is primarily aimed at imparting basic knowledge on Space Technology, Space Science and Space Applications to the younger ones with the intent of arousing their interest in the emerging areas of Space activities.

Participants: It is proposed to select 3 students each from each State/ Union Territory to participate in this programme covering CBSE, ICSE and State syllabus.

Eligibility: Those who have just completed 9th standard will be eligible for the online registration. The selection is based on the 8th Standard academic performance and extracurricular activities. Students belonging to the rural area have been given special weightage in the selection criteria. In case there is tie between the selected candidates, the younger candidates will be given priority.

CHANG'E-4:

Scientists have said they could be a step closer to solving the riddle behind the Moon's formation, unveiling the most detailed survey yet of the far side of Earth's satellite.

In January, the *Chinese spacecraft Chang'e-4* — named after the moon goddess in Chinese mythology — became the first ever craft to touch down on the far side of the lunar surface.



LONG MARCH 3B/E | CHANG'E 4 (LANDER AND ROVER) GDBARRETT.COM

LAUNCHING: DECEMBER 7TH, 2018 - 12:30 PM EST (17:30 UTC)

MISSION
 CHANG'E 4 IS A CHINESE LUNAR EXPLORATION MISSION, INCORPORATING A ROBOTIC LANDER AND ROVER. CHANG'E 4 WILL BE CHINA'S SECOND LUNAR LANDER AND ROVER. THE SPACECRAFT IS NAMED AFTER THE CHINESE MOON GODDESS. CHANG'E 4 INCLUDES THE QUEQIAO SATELLITE, TWO LONGJIANG MICROSATELLITES AS WELL AS A LANDER AND ROVER.

LAUNCHING FROM
 XICHANG SATELLITE LAUNCH CENTER
 PEOPLE'S REPUBLIC OF CHINA

MISSION PAYLOAD
 CHANG'E 4 (LANDER AND ROVER)

ORBIT
 LUNAR ORBIT

LAUNCH VEHICLE
 LONG MARCH 3B/E

MISSION TYPE
 ORBITER, LANDER, LUNAR ROVER

THIS WILL BE THE FIRST MISSION TO ATTEMPT SOFT LANDING ON THE FAR SIDE OF THE MOON.

Key findings:

- China landed its probe in the **Von Karmen Crater in the Aitken Basin** at the Moon's south pole — home to one of the largest impact craters known in the solar system.
- They detected materials such as olivine and low-calcium pyroxene that are rare elsewhere on the surface. Researchers suggest that these materials were ejected from the Moon's upper mantle when it was struck by a meteor.

How was moon born?

The most widely accepted theory is that moon was born when a massive protoplanet slammed into young Earth, sending plenty of terrestrial building blocks into orbit around it.

Scientists suspect that the moon was covered in a magma ocean during its very early days. As it progressively cooled and solidified, denser minerals remained in the ocean's depths while less dense minerals floated to the surface. This meant the geochemical compositions of the eventual mantle and crust layers turned out to be distinct from each other.

About the mission:

- Chang'e 4 is the fourth mission in the country's lunar mission series which is being named after the Chinese moon goddess.
- The tasks of the Chang'e-4 probe include low-frequency radio astronomical observation, surveying the terrain and landforms, detecting the mineral composition, and measuring the neutron radiation and neutral atoms to study the environment on the far side of the moon.

Significance of the mission:

According to experts, landing on the far side of the moon is undoubtedly one of the most challenging missions ever launched by any of the world's superpowers.

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SATURDAY
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SUNDAY
3 CLASSES (Total 6 hrs)

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SHIMLA : NEAR CO-OPERATIVE BANK, CHHOTA SHIMLA. Ph.: 86288-68800

ART AND CULTURE

SANAULI:

A 4,000-year-old rice, dal, sacred chambers and coffins found by ASI.

Sanauli is located on the left bank of the River Yamuna, 68 km north-east of Delhi which brought to light the largest necropolis of the late Harappan period datable to around early part of second millennium BCE.

The three chariots, some coffins, shields, swords and helmets had been unearthed, pointing towards the existence of **a “warrior class in the area around 2,000 BCE”**. ***It is contemporary to the last phase of the mature Harappan culture.*** These findings are important to understand the culture pattern of the Upper Ganga-Yamuna doab.

SRI VEDANTA DESIKAN:

A postage stamp has been released to commemorate **750th birth anniversary of Sri Vedanta Desikan**.

Sri Vedanta Desikan:

- Sri Vedanta Desikan (1268–1369) was **a Sri Vaishnava guru/philosopher and one of the most important propounder of Sri Vaishnavism in the post-Ramanuja period**.
- He was a poet, devotee, philosopher and master-teacher (desikan).
- He was **the disciple of Kidambi Appullar**, also known as **Aathreya Ramanujachariar**, who himself was of a master-disciple lineage that began with Ramanuja.
- He is considered to be avatar (incarnation) of the divine bell of **Venkateswara of Tirumalai** by the Vadakalai sect of Sri Vaishnavite.
- **Literary works:** Sri Sthothra Nidhi, Sri Paduka Sahasram, Rahasya Granthams, Sri Desika Prabandham, Kavyams.
- **Honors:** Sarvathanthra Swathanthrar, Kavitharkiga Simham, Vedanthachariar.

BASAVA JAYANTHI WAS OBSERVED ON BIRTHDAY OF BASAVANNA, A HINDU KANNADA POET OF 12TH CENTURY.

About Basavanna:

- Basavanna was **a 12th-century philosopher, statesman, Kannada poet and a social reformer** during the reign of the **Kalachuri-dynasty king Bijjala I in Karnataka, India**.
- Basavanna spread social awareness through his poetry, popularly known as **Vachanaas**. Basavanna **rejected gender or social discrimination, superstitions and rituals**.
- He introduced new public institutions such as the **Anubhava Mantapa** (or, the “hall of spiritual experience”), which welcomed **men and women from all socio-economic backgrounds to discuss spiritual and mundane questions of life, in open**.
- As a leader, he developed and inspired a new devotional movement named **Virashaivas, or “ardent, heroic worshippers of Shiva”**. This movement shared its roots in the ongoing Tamil Bhakti movement, particularly the Shaiva **Nayanars traditions**, over the 7th- to 11th-century.

- Basava *championed devotional worship that rejected temple worship and rituals* led by Brahmins, and replaced it with personalized direct worship of Shiva through practices such as individually worn icons and symbols like a small linga.
- Basaveshwara is the *first Kannadiga in whose honour a commemorative coin has been minted in recognition of his social reforms*.
- In November 2015, the Prime Minister of India Narendra Modi inaugurated the *statue of Basaveshwara along the bank of the river Thames at Lambeth in London*.

Basavanna and Sharana movement:

- *The Sharana movement he presided over attracted people from all castes*, and like most strands of the Bhakti movement, produced a corpus of literature, the vachanas that unveiled the spiritual universe of the Veerashaiva saints.
- The egalitarianism of Basavanna's Sharana movement was too radical for its times.
- He set up the Anubhava Mandapa, where the Sharanas, drawn from different castes and communities, gathered and engaged in learning and discussions.
- Sharanas challenged the final bastion of the caste order: they organised a wedding where the bridegroom was from a lower caste, and the bride a Brahmin

THRISSUR POORAM:

Known as the *festival of festivals*, Thrissur Pooram has a tradition of more than 200 years. This spectacular event was *started by Sakthan Thampuran*, the erstwhile ruler of Kochi. Held on the *Moolam asterism in the Malayalam month of Medam (April-May)*, festival related events take place at the *Vadakkumnathan temple* situated in the heart of Thrissur town and the adjoining Thekkinkadu ground.

The *pooram festival mainly happens between two groups* representing the geographic divisions of Paramekkavu and Thiruvambadi. They will *compete in their respective presentations of richly caparisoned elephants, traditional orchestra called panchavadyam*, the swift and rhythmic changing of brightly coloured and sequined parasols called *kudamattom* and the dazzling fireworks in the early morning hours are the festival highlights.

THE GIANT STATUE OF ISHWAR CHANDRA WAS RECENTLY VANDALIZED BY SOME POLITICAL GOONS IN KOLKATA.


About Ishwar Chandra Vidyasagar:

- He was the 19th century intellectual.
- He was perhaps the first Indian reformer to put forward the issues of women.
- His Bengali primer, *Borno Porichoy*, remains, more than 125 years after his death in 1891, the introduction to the alphabet for nearly all Bengali children.
- He was a *polymath* who reconstructed the modern Bengali alphabet and initiated pathbreaking *reform in traditional upper caste Hindu society*.
- He studied Sanskrit grammar, literature, Vedanta philosophy, logic, astronomy, and Hindu law for more than 12 years at *Sanskrit College in Calcutta*, and received the title of *Vidyasagar — Ocean of Learning — at the age of just 21*.

- Privately, he studied English literature and philosophy and was appointed **principal of Sanskrit College** on January 22, 1851.








Reforms by Ishwar Chandra:

- The focus of his social reform was women — and he spent his life's energies trying to ensure an end to the practice of child marriage and initiate widow remarriage. He argued, on the basis of scriptures and old commentaries, in favour of the remarriage of widows in the same way as Roy did for the abolition of Sati.
- He launched a powerful attack on the practice of marrying off girls aged 10 or even younger, pointing to social, ethical, and hygiene issues, and rejecting the validity of the Dharma Shastras that advocated it. He showed that there was no prohibition on widows remarrying in the entire body of 'Smriti' literature (the Sutras and the Shastras).
- He campaigned against **polygamy**.
- On October 14, 1855, Vidyasagar presented a petition to the Government of India praying for early passing a law to remove all obstacles to the marriage of Hindu widows and to declare the issue of all such marriages to be legitimate.
- On July 16, 1856, **The Hindu Widows' Remarriage Act**, known as Act XV, was passed.


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MISCELLANEOUS

1 MAY (LABOUR DAY):

*The Labour Day was observed across the world on May 1, 2019. The day is also known as **International Worker's Day** and **May Day**.*

In India, the first celebration of the Labour Day was organised in Madras (now Chennai) by the Labour Kisan Party of Hindustan on May 1, 1923.

- The Labour Day is celebrated to commemorate the happenings of May 4, 1886, the Haymarket affair (Haymarket Massacre) in the Chicago.
- It was a big event as workers were on the general strike for their eight-hour workday and police were doing their job of dispersing the general public from the crowd. Suddenly, a bomb was thrown over the crowd and police started firing over the workers and four demonstrators were killed.
- It was due to the sacrifice of these workers that eight-hours were declared as the legal time for the workers in the National Convention at Chicago in 1884 by the American Federation of Labor.
- To commemorate this event, the Second International, a pan-national organisation of socialist and communist political parties, marked 1 May as the Labour Day in 1891.

MASOOD AZHAR AS A GLOBAL TERRORIST:

The United Nations Security Council has designated JeM Chief, Masood Azhar as a global terrorist after China lifted its technical hold on his listing under the UNSC 1267 sanctions committee. The JeM itself was sanctioned by the 1267 Committee in 2001.

*The proposal to designate Azhar **under the 1267 Al Qaeda Sanctions Committee of the UN Security Council** was moved by France, UK and the US on February 27.*

Reasons for listing:

- His support for the JeM since its founding
- Being associated with the al-Qaeda by recruiting for them.
- Participating in the financing, planning, facilitating, preparing, or perpetrating of acts or activities or supplying, selling or transferring arms and related material.
- His role in recruiting fighters in Afghanistan.

Sanctions committee:

The Sanctions Committee of the UN Nations Security Council was established under Resolution 1267 in 1999, which imposed limited sanctions on the Taliban. Over time, the sanctions regime has evolved to include a lot of measures against designated individuals and entities.

The sanctions committee also **oversees the implementation of the sanctions measures and reports annually to the Security Council on the implementation of these measures.**

What happens when the committee designates someone as a global terrorist?

Asset freeze: All member states of the United Nations are required to freeze without delay the funds and other financial assets or economic resources of designated individuals and entities.

Travel ban: All member states are required to prevent the entry into or transit through their territories by designated individuals.

Arms embargo: All member states are required to prevent the direct or indirect supply.

INS RANJIT:

It is Indian Navy's missile destroyer.

- It was third of five Kashin- class destroyers built by former USSR.
- It is first of five Rajput class destroyer to go out of service.
- It will be decommissioned.

INS VELA:

It is Indian Navy's fourth Stealth Scorpene-Class submarine.

- Launched by MDL after it entered into contract with French collaborator Ms Naval Group (earlier known as DCNS) for construction and transfer of technology for six Scorpene class submarines under Project 75.
- It is a diesel-electric attack submarine of Kalvari-class.
- INS Vela was first commissioned on August 31, 1973 in the Indian Naval Service and continued to serve for 37 years. It was the country's oldest submarine when it was decommissioned on June 25, 2010.

GROUP SAIL:

Indian Navy Ships Kolkata and Shakti recently carried out Group Sail with naval ships of Japan, Philippines and the United States of America in the South China Sea.

The Group Sail exercise aims to deepen the existing partnership and foster mutual understanding among participating navies.

The latest exercise with naval ships of Japan, Philippines and United States showcased India's commitment to operating with like-minded nations to ensure safe maritime environment through enhanced interoperability.

APACHE GUARDIAN ATTACK HELICOPTERS:

US aerospace major Boeing has handed over first of the 22 Apache Guardian attack helicopters to the Indian Air Force today.

AH-64E Apache:

- It is a leading multi-role attack helicopter and is flown by the US Army.
- The helicopter has been customised to suit the IAF's future requirements and would have significant capability in mountainous terrain.
- It has the capability to carry out precision attacks at standoff ranges and operate in hostile airspace with threats from ground.
- Its ability to transmit and receive the battlefield picture, to and from the weapon systems through data networking makes it a lethal acquisition.

DRDO RECENTLY CONDUCTED THE FLIGHT TEST OF ABHYAS

High-speed Expendable Aerial Target (HEAT) from a test range in Odisha.

- The configuration of ABHYAS is designed on an in-line small gas turbine engine and it uses *indigenously developed MEMS based navigation system.*

- 'Abhyas' is designed for *autonomous flying with the help of an autopilot*.
- A *Luneburg lens* in the nose cone improves the radar cross-section of the target for weapons practice.
- It also has an *acoustic miss distance indicator (AMD)* to indicate the missed distance.

CHRISTCHURCH CALL TO ACTION:

India has joined a major global initiative '*Christchurch call to action*' to combat terrorism and extremism online; and make internet a safe and secure place to be.

The initiative has been named after the New Zealand city Christchurch, where over 50 people were killed and over 20 got injured in shootings at two mosques.

About it:

- The initiative was launched during the "*Online Extremism Summit*" in Paris.
- It was *launched jointly by India, France, New Zealand, Canada and several other countries*. A total of 18 countries including the European Union supported the initiative along with social media giants like Twitter, Facebook, Google and Microsoft.
- **Aim** to prevent the abuse of the internet.
- The initiative outlines collective and voluntary commitments from governments and online service providers to address the issue of terrorist and violent extremist content online.
- It calls for a free, open and secure internet to promote connectivity, enhance social inclusiveness and foster economic growth.

Need:

- As internet is not resistant towards the abuse by terrorists and violent extremists, there is an urgent need of collective efforts to secure the internet from such terror groups. Recent Christchurch terror attacks were broadcasted online by terrorists. The broadcasting of such content online has severe impact on victims of such incident, on collective security and on people across the world.
- The Christchurch attack stressed on the urgent call of action by the governments, civil society, online service providers, and social media companies to eliminate terrorist and extremist content online.

E-VIDHAN:

- It is a *Mission Mode Project (MMP)* comes under the *Digital India Programme*.
- **Ministry of Parliamentary Affairs (MoPA)** is the 'Nodal Ministry' for its implementation in all the 31 States/UTs with Legislatures.
- The **funding** for e-Vidhan is provided by the MoPA and *technical support by Ministry of Electronics and Information Technology (MietY)*.
- The funding of NeVA is through *Central Sponsored Schemes*. 60:40; and 90:10 for North East & hilly States and 100% for UTs.
- *Himachal Pradesh is already the first Digital Legislature of the country*.

INDIAN COAST GUARD SHIP (ICGS) VIGRAHA:

It has been decommissioned recently at Visakhapatnam, Andhra Pradesh.

- It is a frontline offshore patrol vessel (OPV). It was commissioned into service on April 12, 1990.

- It was the seventh OPV built by Mazagaon Dock Ltd, Mumbai. It was first of its class among other OPVs of third series.
- It was also leased to Sri Lankan Navy on a dry lease from August 2008 to January 2011. Later, it was re-inducted into Indian Coast Guard (IGC) in January 2019 after which it was continuously based at Visakhapatnam.

VANDE BHARAT EXPRESS:

India's first engineless train, 'Vande Bharat Express', also known as 'Train 18', completed 1 lakh running kilometres without missing a single trip on May 16, 2019 in just three months time span.

- The high speed has been manufactured by the Integral Coach Factory (ICF) in the period of 18 months under the 'Make in India' initiative.
- It is India's first semi-high speed train equipped with world class passenger amenities.
- It runs between Delhi and Varanasi at speed of 160 kmph.
- Touted as the Next Generation Shatabdi Express, Vande Bharat Express is the first long-distance train without separate locomotive (engine) and is driven by a self-propulsion module.

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Time Allowed: Three Hours

Maximum Marks: 200

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions.

1. There are 28 questions printed in English.
2. All question are compulsory
3. Candidate should attempt questions/parts as per the instructions given in the section.
4. The number of marks carried by the question /parts as per is indicated against it.
5. All parts of question shall be attempted at the place designated for hem in the question cum answer Booklet. Attempts of part/questions shall be counted in sequential order.
6. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-answer Booklet must be clearly struck off.
7. Candidates are required to write clear, legible and concise answers and to adhere to word limits, wherever indicated. Failure to adhere to word limit may be penalized.

Attempt all question. Answer to Question No. 1 to 15 should not exceed to 60 words in each case. Contents of the answers are more important than their length. Each question carries 4 marks.

1. What is the difference between Culture and Civilization?

Answer: Culture consists of the belief, behavior objects, and other characteristics common to the members of a particular group vs. society.

Culture include many societal aspects language, customs, values, norms, more etc.

Civilization involves joint survival via joint action. It is capable of providing improved quality of life, security, material abundance, the arts, culture, and the possibility of individual fulfillment and of happiness.

2. How Kullu came to Prominence?

Answer: Kullu was the second most ancient state after Trigarta (Kangra) and Cunningham called it as kulut.

Bihangmani Pal is called as the founder of the state of Kullu is second century A.D. Kullu is located on the banks of the Beas River in the Kullu valley. The original name of Kullu was KULUTA and finds its mention in 'Mahabharata', The 'Markandya Purana', the 'British Samhita', etc. It came to prominence in 17th century as it played a pivotal role in trade between central Asia and the Southern plains. The boundaries were further extended to Lahaul and Spiti. It was the sub-division of the district of Kangra

first. In 1963, it was made a separate district. Presently, Kullu comprises of Lug valley, upper valley, Parvati valley, Rupi valley and Tirthan valley.

3. Write a brief note on Topography of Himachal?

Answer: Himachal Pradesh lies in the Northern part of India in western Himalayas region. Elevation ranges from 250 meters to over 7,026 meters above sea level. The physiographic division from south to North are the crest line of Shiwaliks known by many names like Hathi Dhar, Sikandar Dhar, chaumukhi Dhar, Solasinghi Dhar, Ramgarh Dhar, Naina Devi Dhar and Dharti Dhar. In lesser Himalayas, the prominent range is Dhauladhar and the average elevation ranges from 1000 to 4000 m and width from 60 to 40 km. The other prominent and largest range is Pir Panjals which meets Greater Himalayas at Deo Tibba in Kullu. Other minor ranges are Dagni Dhar, Mani Mahesh and Dhog Dhar in the Ravi valley; Jalori Dhar and Shikari Dhar in Beas and Satluj Basins and Nagtibb range, Mussoire range and Shimla hills in the Yamuna basin. The Great Himalayas at an elevation ranging between 5000-7000 m. Rims across the northeastern border of Himachal through Lahaul-Spiti and Kinnaur Districts. Zaskar range elevates averagely at 3,000 m and its peaks rise over 6,500 m Satluj cuts across the Zaskar range forming a deep gorge.

4. What is Civil Society?

Answer: Civil Society is a non-governmental, private, voluntarily, organized association or institution of the people, through which they try to secure their needs, desires and objectives. Andrew Heywood called it as 'a realm of association, business, interest group, classes' families and so on. Civil society works for discharging several economic, social, cultural moral and other responsibilities which fall in the domain of private activities. Civil Society groups are becoming more tech savvy as they use social media platforms and formats such as video and podcasts to raise awareness about their causes and charitable donations.

5. What regions are drained by River Satluj?

Answer: The Satluj is the only river in Himachal which traverse through the whole Himalayan region. It enters in Himachal at Shipkila (6, 608m) and flows in the south westerly direction through Kinnaur, Shimla, Kullu, Mandi, Solan and Bilaspur districts in Himachal. It meets beas river near Makhu, ferozpur district in Punjab state.

Finally after entering Pakistan, it flows into Arabian Sea. The major settlements drained by the river in Himachal are Namgia, Kalpa, Rampur, Tattapani, Suni and Prilaspur.

6. Give a brief account of types of vegetation in Himachal?

Answer: According to National forest Policy, 1988, at least two-third of the geographical area should be under forest in Himachal Pradesh. However, keeping in view that about 20% of the area is inaccessible and beyond the tree limit, the state Government aims to bring 50% of the geographical area under forest cover. The richness and diversity of our flora can be gauged from the fact that, out of total 45,000 species found in the country as many as 3, 295 species (7.32%) are reported in the state.

The Vegetation varies from Dry Scrub forests at lower altitudes to Alpine Pastures at higher altitudes. In between these two extremes, distinct vegetational zones of mixed Deciduous forests, Bamboo, Chil, Oaks, Deodar, Kail, Fir and Spruce are formed.

7. Is it correct to say that the land of India slopes from West to east?

Answer: Yes, the land of India has slope from west to east. When Indian plate move & come to current position, It meet Eurasian plate at paini knot & North eastern area. But when further movent of Inidan Plate is not possible it jerk on plate and whole India continent incline toward east and some proof of this area

1. Most of line of Himalayas flows toward BOB, we know river flow toward tower area.
2. River originate in western ghat shadow and also goes to BOB.

8. Why has Mumbai longer Sunshine after Offices hours than Kolkata?

Answer: The Sun Rises from the east and sets in West. The apparent movement is caused by rotation of earth from the east. Kolkata is on east side and Mumbai is on West side. Hence we know that Sun rises early in the Kolkata Then Mumbai. Mumbai is on Western side and experiences morning sunrise 62 minutes late Than Kolkata. So, it clear that sunset would be early in Kolkata in comparison to Mumbai.

9. Why is the Coromandel Coastal plain wider than the Malabar Coast?

Answer: Coromandel Coastal plain is wider than the Malabar Coastal plain because of the following reasons:

- Malabar Coastal plain is a submergent coastal while Coromandel Coastal plain is a emergent coastal plain.
- Malabar Coastal plain is roughly 98 Km wide while Coromandel coastal plain is 120-200 Km wide because of soft and hard landform strata which is not easily eroded by sea waves Kinetic motion
- Coromandel Coast has more delta formation of rivers and also because of marshy and alluvial deposits of rivers.

10. What do you understand by Deccan Trap?

Answer: Deccan Traps are a large igneous province located on the Deccan Plateau of west-central India and are one of the largest volcanic features on Earth. The Deccan Traps are food basalts similar to the Columbia River basalts of the north western United States.

The term 'trap' has been used in geology since 1785-95 for staircase like rock formation.

11. What is Glacier?

Answer: Glaciers are made up of fallen snow that, over many years, compresses into large, Thickened ice masses. Glaciers form when snow remains in one location long enough to transform into ice. Due to sheer mass, glaciers flow like very slow rivers.

Presently glaciers occupy about 10% of the world's total land area, with most located in Polar Regions like Antarctica Greenland and the Canadian Arctic.

There are many types of glaciers.

- a) Mountain Glaciers.

- b) Valley Glaciers.
- c) Tidewater Glaciers.
- d) Piedmont Glaciers.
- e) Hanging Glaciers.

12. Trade fairs of Himachal?

Answers: Festivals and fairs are an important part of the cultural life of the people. They have educational, social as well as religious characteristics. They serve the need of social interaction not only for economic subsistence but also for emotional integration and better understanding of one another. Himachal, trade fairs is an exhibition organized by local traders or small scale traders to showcase and demonstrate their indigenous products.

Example:

Lavi fair- Annual fair held in the month of November where the traders mainly from Kinnaur participates with horse, mules, Pashminas, colts, Yaks chilgoza, pattis, raw semi-finished wool and other dry fruits produced in the state are brought for selling.

Renuka fair- provides business exposure to the local people of Pachhad tehsil of sirmaaur. Rural people market their produce of walnuts and wet ginger etc.

13. Write a short note on Nalwari fair?

Answers: it is a cattle fair held on the 4th of chaitra every year and continues upto the 11th of the month. This a fair in which cattle are brought and sold. The fair was started during the region of Raja vijay chand of Bilaspur. The venue of this fair in Bilaspur district is luhnu ground.

In local dialed the ceremony is called as the Khunda Gama.

The fair start at Ropar in Punjab from where trades move with their cattle's towards the hill areas.'

14. Buddhism in HP.

Answer: The very earliest influence of Buddhism in Himachal Pradesh is traced to the Ashokan period in the 3rd century B.C. he had established many stupas and one of them can be traced in Kulu Valley. In 7th Century, King Songsten Gampo of Tibet had depended Thoni Sambota to visit Buddhist viharas in India to imbibe more of India knowledge.

In 749 AD, Padma sambhava with his compatriot shantarakshita established the Vajrayana Buddhism in the Western Himalayas region.

Formation of 'MC Leoad Ganj' as capital in-Exile at Dharmshala by the Dalai lama too Marks and promotes the Influence of Buddhism in Himachal.

15. Guru Ghantal Monastery?

Answer: Guru Ghantal is in Lahaul and Spiti district of Himachal Pradesh. It is also known as Gindla, or kundlah Gompa. It stands on a mountain above the point of confluence of the chandra and Bhaga Rivers. It was built by Padma Sambhav in 8th century. It is now connected with Drukpa Lineage of the Kagyu school of Tibetan Buddhism but its history long precedes the formation of the sect.

Attempt all questions. Answer to Question No. 16 to 25 should not exceed to 120 words in each case. Contents of the answers are more important than their length. Each question carries 8 marks.

16. Discuss the Characteristics of Indian Culture.

Answer: INDIAN CULTURE

Fundamental characteristics of Indian culture reveal important aspect its diversity or diverse cultural traits and the fundamental underlying flame of unity.

Physical Diversity: Geography has given India different physical diversities in its very structure.

Racial Diversity: This population is composed of so many races and it represents primarily all the ethnographical dimensions of mankind.

Linguistic Diversity: Racial diversity of India has its direct reflection on the linguistic variety of India.

Scriptural and Literary Diversity: India being a multi-lingual country has a vast treasure of different scripts and literatures. When the languages are many, naturally scripts are of different types.

Socio-Cultural Diversity: The variations in physical features, racial structure and languages have resulted in considerable differences in dress, food habits, social customs and beliefs of the people.

Religious Diversity: India is a country of many religions. All the major religions of the world are found here. Mention may be made of Hinduism, Buddhism, Jainism, Christianity, Islam, Sikhism, Zoroastrianism etc.

People of different religions live here in sizeable numbers. All these religions have grown here quite freely with their different sects and sub-sects.

Political Diversity: The vastness of the country, its geographical diversities, various races with various languages, religions, creeds and systems of belief have all contributed significantly to the political unification of India.

Religious Unity: India is a country where several religions are freely adopted and practiced. While discussing the diversity of Indian religions we have found the existence of all major religions of the world. But the significant feature is that among all these religions we find a peaceful and harmonious co-existence. The term 'secular' used in the Indian Constitution, guarantees the citizens equality of all religions. People of all religions and beliefs enjoy this freedom.

17. What factors were responsible for the emergence of capitalism?

Answer: The underlying theme of capitalism is the use of wealth to create more wealth. The simplest form of this is lending money at interest, reviled in the middle Ages as the sin of usury.

At a more sophisticated level capitalism involves investing money in a project in return for a share of the profit.

The history of capitalism has diverse and much debated roots, but fully-fledged capitalism is generally thought to have emerged in north-west Europe, especially in the Low Countries and Britain, in the sixteenth to seventeenth centuries.

The historiography of capitalism can be divided into two broad schools. One is associated with economic liberalism, with the eighteenth-century economist Adam Smith as a foundational figure, and one with Marxism, drawing particular inspiration from the nineteenth-century economist Karl Marx.

Modern capitalism, however, only fully emerged in the early modern period between the 16th and 18th centuries, with the establishment of mercantilism or merchant capitalism. England began a large-scale and integrative approach to mercantilism during the Elizabethan Era. The period featured various but often disjointed efforts by the court of Queen Elizabeth to develop a naval and merchant fleet capable of challenging the Spanish stranglehold on trade and of expanding the growth of bullion at home. Queen

Elizabeth promoted the Trade and Navigation Acts in Parliament and issued orders to her navy for the protection and promotion of English shipping. Under mercantilism, European merchants, backed by state controls, subsidies, and monopolies, made most of their profits from the buying and selling of goods.

18. What is industrial Revolution? Discuss its stages.

Answer:

First to Fourth Industrial Revolution

Industrial Revolution involves introduction and uses of **new manufacturing processes and technologies** during a time period. The transitions, thus, gives **improved and faster means of production**. Four such revolutions that have occurred are **TABULATED Below**.

S. No.	Time Period	Remarks
FIRST	18 th to 19 th centuries	Iron and textile industries and steam engines developed in Europe and America. People moved from farm to factories. Spinning jenny, spinning mule, etc were used.
SECOND	1870-1914 (before WW I)	Growth of pre-existing industries and expansion of new ones (steel, oil and electricity) took place. Telephone, light bulb and internal combustion engine were developed.
THIRD	Ongoing since 1980s	Advancement of technology was made from analog electronic and mechanical devices to digital technology . Personal computer, internet, etc were developed.
FOURTH	Phrase first used in 2016	It includes emerging technologies like robotics, artificial intelligence, quantum computing, biotechnology, internet of Things (IoT), 3D printing, etc. IT merges physical, digital and biological spheres.

19. What factors kept Indian society united till date?

Answer: India is a vast country with various types of diversities. The entire society is divided by caste, religion, language, race etc. But with all these diversities we live together as there is a fundamental unity among us. Unified India is not a new concept. In the past also the concept of one unified India attracted many philosophers.

So many factors are contributing for the unification of India.

1. Geographical Unity: India has its own fixed natural boundary, because of which different communities are forced to live together. It is surrounded on the one side by the great Himalayan range and on the other sides by the high seas. India has always referred to this vast land expanding from the Himalayas in the North to the Kanya Kumari in the South. Even today India includes the realization of a geographical unity.

2. Cultural Unity: Indian culture possesses a fundamental unity. The fundamental approach to literature, philosophy, tradition and customs is typically Indian. Some of the religious and cultural festivals are celebrated all over the country without any consideration of caste or religion. Likewise, social institutions like caste and joint family are found throughout India. Even they are found among Muslims and Christians.

3. Linguistic Unity: In India a large number of languages are found. The problem of multiplicity of languages is solved because Sanskrit works as a link language. People of the North and the South have

accepted Sanskrit as their language. Sanskrit is the only language in which the entire ancient literature and philosophy of the past are recorded.

4. Emotional Unity: Finally, there is an emotional bond in India that binds all the members of the nation. The very word Bharat Varsha binds all Indians and emotionally they become closer to one another. They can also sacrifice their lives to protect India from foreigners.

20. What are the features of Indian society?

Answer: The most often noticed feature of Indian society is "Unity in Diversity". This phrase celebrates how India has been stronger by welcoming various cultural, social and ethnic elements. It also transcends the notion accommodation without assimilation has been the key feature of Indian civilization. India has accommodated different elements of society without letting them lose their separate identity. We have got enough freedom to practice our own way of life.

"Unity in diversity" is a popular motto within and among nation states, and also in political and social movements.

Segmental Division of Society: The Indian society stands divided into several castes and the position of each caste is based on traditional importance. The position of each individual is related to the position of his caste group and right at the time of his birth he becomes a member of either a high caste or a low caste.

Social and Religious Hierarchy: Each caste group stands alone as a particular social group. For example, several castes are considered to be Brahmin castes while several others are considered to be Kashtriya castes.

Some castes are considered to be higher castes while others are considered to be lower castes.

All the castes are bound by a well defined system of social and religious functions and relations.

Social and religious hierarchy runs along the caste hierarchy.

Caste-based Occupational Groups: Traditionally castes in the Indian society have been inseparably associated with several professions. Parental occupation is always considered a good and essential occupation for the new generation. Only the son of a purohit or pundit can perform the functions of a purohit or pundit.

Indian society has been traditionally a caste-based stratified society. In the past, such stratification acted as a source of inequalities and exploitation of members of some castes by the members of the so-called high castes.

Now the system has been changing and the Constitution of India has laid down several laws for securing the objective of social, economic political justice and equality of status and opportunity for all. Caste based rigid social stratification has been now undergoing changes and the role of the caste is getting diluted in the Indian society.

21. Discuss the characterscites of Deccan Trap?

Answer: Deccan Traps are a large igneous province located on the Deccan Plateau of west-central India. It is found in the Deccan plateau in the Indian Peninsular. Its features are as follows:

- 1) It covers an area of about 500, 000 km². It is widely prevalent in the provinces found in the Deccan plateau.
- 2) It is made up of mostly basaltic lava that flooded these regions and in most areas it is about 2000 m thick.

- 3) the most prevalent type of soil in this region is black in color due to the presence of titanium salts.
- 4) The Deccan trap has been subjected to erosion and tectonic movement over the years that have resulted to its staircase like structure and this is why it is referred to as a trap.
- 5) The soil, majorly clay, is moisture retentive and very productive, however, it is free of humus-this is especially so in the lower lands.

22. Why are Aravallis called a divide between Mewar and Marwar?

Answer: Aravallis is one of the oldest mountain ranges of world. It is spread from Gujarat to Delhi in SW to NE direction wise. Its height is very low because of old mountains and erosion due to physical and chemical properties. When monsoon enters in Rajasthan, it is parallel to Aravallis ranges which lead to poor rain fall because of poor upliftment of clouds in this region and but Mount Abu gets very large rainfall around 1000cm due to its height. But eastern side of Aravallis gets on average more rainfall than western one due to Bay of Bengal branch of monsoon gets uplifted by Aravallis range. This difference leads to difference in climate and farming pattern and all together difference in livelihood. That's why Aravallis is known for divide between Marwar (western) and Mewar (eastern). Mewar region is more prosperous and has water surplus than Marwar.

23. What efforts were made by the Government of India in recent Kerala Floods?

Answer: Kerala is facing the worst floods in over seven decades. More than half of the state is flood-hit. Army, navy, air force and National Disaster Response Force teams were deployed in many areas of the worst-hit Idukki and Wayanad districts.

Union home minister Rajnath Singh promised all possible central help to Kerala to deal with the unprecedented flooding after carrying out an aerial survey of the flood-hit areas with chief minister and announced immediate relief of Rs 100 crore to the state. Many organisations study about different issues like health, farming include soil status etc.

24. Classify man-made Disasters?

Answer: Disasters also can be caused by humans. Hazardous materials emergencies include chemical spills and Man-made disasters are the consequence of technological or human hazards.

Examples include stampedes, fires, transport accidents, industrial accidents, oil spills and nuclear explosions/radiation. War and deliberate attacks may also be put in this category. As with natural hazards, man-made hazards are events that have not happened, for instance terrorism. Man-made disasters are examples of specific cases where man-made hazards have become reality in an event.

- Nuclear disasters Biological disasters Chemical disasters Fire accidents Road accidents Terrorism Epidemic Etc.
- It is a type of explosion deriving its force from nuclear reactions of fission and fusion. It is of two types fission and fusion. Egs. of fission are atomic bombs, A-bombs, fission bombs, Egs. of fusion bombs are hydrogen bombs, H-bombs, fusion bombs etc.
- Precautions from nuclear accident Common indicators of these disasters are vomiting, nausea, dizziness etc. Don't look at fire as it causes instant blindness Close all doors and windows as radioactivity doesn't penetrate into solid structures Cover all food and water and listen govt. orders

- These are referred as poor mans nuclear bomb as these are easy to manufacture, transport and have the ability to kill hundreds and thousands of people. They are delivered using dusting airplanes or small perfumes atomizers. They have ability to generate immediate effects.

25. Why the frequency of earthquake has increased in India?

Answer: There are several factors for increase in Earthquake frequency in India. The Indian subcontinent has a history of devastating earthquakes. The major reason for the high frequency and intensity of the earthquakes is that the Indian tectonic plate is slowly going underneath Eurasian plate with the convergence rate of 47mm per year. Due to this energy accumulation in this region, it is getting prone to greater magnitude earthquakes.

The collision involves the upper portion of India's crusts. Meanwhile, India's deeper, denser crust is thought to be sliding beneath the Tibetan Plateau, giving that feature its high elevation.

Since 1505, Indian subcontinent has seen 61 major earthquakes and around 100 minor quakes in past one year.

There are several other reasons too for this tumult.

- There have been variations in the speed of the Earth's rotation which may have triggered intense seismic activity. Although fluctuations in the rotation are small and may only change the length of a day by one millisecond, they often lead to the release of vast amounts of underground energy, researchers explain.
- Natural geomorphological phenomenon isn't the only factor responsible for earthquakes. Activities like mining, nuclear explosions and groundwater extraction has seen an increase in the number of human-induced earthquakes.
- Man-made earthquakes are getting more common due to poor planning in infrastructural activities like fracking for oil, dam-building, pumping gas without re-filling.
- Another reason attributed by scientists for increasing earthquakes is the cooling of earth. Scientists claim cooling causes the contraction of the earth's crust, which results into increased volcanic disturbance causing earthquakes.

Attempt all question. Answer to Question No. 26 to 28 should not exceed to 400 words in each case. Contents of the answers are more important than their length. Each question carries 20 marks.

26. Discuss the various stages of rock cut architecture?

Answer: The excise of creating structure by caring it out of the natural rock is know as rock cut architecture in the world, India rock-cut architecture is more dicrse and found in greater abundance. The religious character of Indian Rock-cut architecture is another feature to be noted.

Evolution of Rock-cut architecture in India-

Maurya Period: The beginning of earlier rock-cut cave architecture goes back t the Maurya period. The Maurya emperor Ashoka used stone as a medium of proclamation for the message of law & tolerance unknown as "Dhamma" through the rock edits & pillar edicts. The architectural remains from Marijan dynasty onwards are orerw helmingly Buddhist but Vedic tradition of Brahmins also flourished, as did the Jainism.

Gupta Period: Devotional worship through sculpted images increased in popularity among various sects which grew and merged into later forms of Hinduism, becoming the dominant form of religion under Gupta dynasty.

Buddhist influence on Rock Cut Architecture: There were three characteristic forms of Buddhist architecture which developed the monumental funerary mound or stupa, hall of worship of the chaitya and the monastery or Vihara.

Barabar Caves: Western Indian architecture of Rock Cut caves was influenced by the Lamas Rishi & Sudama Caves which were excavated around 250BC in Barabar hills in Bihar considered the oldest example of Rock cut architecture in India.

Udaygiri & Khandagiri Caves: Udaygiri & Khandagiri Caves are located near the City of Bhubaneswar in Odisha and built during the reign of King Kharavela. These caves were supposed to have worked as residential blocks of Jain under.

Ajanta Caves: Ajanta near Aurangabad district of Maharashtra has 29 entirely Buddhist caves. They were excavated in the horseshoe cave of a hill side.

Ellora Caves: Ellora Caves are situated near Aurangabad in a group of 34 caves constructed between 5th to 10th C.A.D during the rule of the Kalachuri, Chalukya & Rashtrakuta dynasty. It is a UNESCO world heritage site for Hindu, Buddhist & Jain cave temple. (17 Hindu, 12 Buddhist & 5 Jains)

Kailash Temple- Cave 16 in Ellora is the largest single monolithic excavation in the World Cave No.16 (Kailash Temple) is considered as the epitome of rock cut architecture in India.

1. Cave 16 has a huge rock screen with carvings and a two level doorway with caves on top. A door on the lower level leads into the double-storey gopuram which has exquisitely carved sculptures on the walls crossed by Ganga & Yamuna. Flank the entrance gateway.
2. There are five subsidiary shrines around the main temple in the circumambulatory path that runs along the side of the hill. This includes a shrine dedicated to river goddesses Ganga, Yamuna & Saraswati & Yojanshala (hall of sacrifice).
3. The main temple is the most impressive. The elephant & lions that form the high plinth of the main temple signify Rashtrakuta power & prosperity.

27. What factor led the development of industrial revolution in England?

Answer: Enormous expansion in Britain's trade in overseas markets was one of the major causes of Technological Revolution. During the seventeenth and eighteenth centuries Britain had carved out an extensive colonial empire and successfully excluded the other powers like Spain, Holland and France from their markets. As a result, she acquired a sort of monopoly in these markets.

The growing demand for the British goods in these markets gave a stimulus to the British manufacturers to take to machine methods. It is well known that the mechanical inventions of the eighteenth century such as spinning, jenny of Hargreaves, the water-frame of Arkwright, the mule of Crompton and the power-loom of Cartwright etc. were invented to increase the production of cotton cloth which was in great demand in India. According to Birnie, "These inventions are sometimes spoken of as the primary cause of the Industrial Revolution.

In reality, they were a secondary cause only. Machines for turning out cheap goods in large quantities are useless unless there is a market capable of absorbing the increased output. The market must come first; the inventions follow. Mechanical discoveries have often the appearance of being due to accident,

but unconsciously the successful inventor works within limits laid down for him by the changing needs of society."

Availability of Capital: The vast amount of capital which England had accumulated out of profits of her growing trade enabled her to make large outlays on machinery and buildings, which in turn contributed to new technological developments.

In addition England also possessed a large amount of loanable capital obtained by the Bank of England from the rich trade of other countries. This capital also helped England to steal a march over other European countries.

Practical bent of mind of the English Researchers: Another factor which contributed to England's lead in the technological revolution was that the English scientists and engineers had a very practical bent of mind. They made inventions keeping in view the needs of the time.

They concentrated mainly on those inventions of science which had practical utility. This was in complete contrast to the continental scientists who concentrated on research in electricity; chemicals etc. which were not of immediate applied relevance.

Small population: The small size of England's population, which could not cope with England's growing trade, also necessitated that new devices should be found out to keep production in line with the growing demand.

This is best exemplified by the changes in the textile industry as well as the coal industry. The shortage of the labour force compelled; the owners to encourage and apply new mechanical devices.

Social and political stability: Britain not only enjoyed complete freedom of trade but also an insular position which saved her from the disastrous consequences of war, which ravaged the countries of Europe.

This social stability prevailing in England encouraged the people to invest in sectors where they could hope to receive high dividend in future. This led to adoption of new techniques and promotion of new industries.

The availability of coal and iron mines close to each other: The location of the coal and iron mines close to each other encouraged the English to evolve new techniques for the manufacture of iron and utilization of the coals. It is well known that the availability of coal and iron ores in large quantities greatly helped the growth of numerous industries in England.

The need for large quantities of coal for smelting of iron ores, transportation etc. necessitated improvement in the techniques of coal mining. Metal cages and tubs were used to lift coal. Even the use of wire ropes for lifting of coal was started a little later. Engines were invented to pump out the water from the mines.

The agricultural revolution: In Britain the agricultural revolution had already taken place which greatly transformed the English society.

It not only made available necessary raw materials to run the new industries but also provided a large number of agricultural labourers for employment in the new factories.

Presence of enterprising people: Finally, the technological changes in England were made possible because of the presence of a sizable section of people who possessed enterprising spirit and requisite technical qualities.

Further this class of people also possessed organizing abilities and was accustomed to the handling of large enterprises and labour force. These people were willing to invest money for the discovery of new techniques and give a fair trial to these techniques.

Risk-taking Private Sector: The presence of a sizable private sector in the country with great capacity of the individual businessmen to take risks also greatly contributed to the industrial revolution. These business-men were willing to take a chance on new things.

In this way they were also supported by the government.

Better means of transport: England possessed a far better network of means of transportation than any other country of Europe which greatly helped the industrial revolution. In this task the government played an important role which spent considerable amount on the improvement of roads and construction of canals.

Geographical location: The geographical location of England also greatly helped in industrial revolution. Being cut-off from the mainland of Europe, England remained immune from wars and upheavals of Napoleonic conflicts and conditions remained quite stable in the country. These stable conditions enabled England to develop their industrial capacity without fear of battle, damage or loss of life.

Flexibility of English social and political system: Above all the flexibility of the English social and political system also greatly contributed to industrial revolution in England.

The members of the upper classes in Britain, unlike their counterparts in the continent, pursued their wealth in the new industrial framework with great enthusiasm. They worked in close co-operation with the middle classes and artisans which greatly facilitated the industrial revolution.

In short, we can say that in comparison to other European countries England was more favourably placed in many respects and no wonder stole lead over them in the field of technological revolution and industrialization.

28. Discuss the events that led to the growth of Kangra?

Answer: Introduction-Himachal Pradesh has a vast diversity in its culture and tradition. This diversity has prevailed from ages. This diversity also reflects in the history too. Each district has a distinct history. This article is on history of ancient Kangra Riyasat of present Kangra district.

This district has very vast history. Kangra was divided into three Riyasats i.e. KANGRA RIYASAT, GULEIR RIYASAT, AND NURPUR RIYASAT. To study history of Kangra we have to study history of all three Riyasats. In this article we have discussed history of Kangra Riyasat. For sake of ease we divide history of Kangra Riyasat into three parts; Ancient, Medieval and modern history.

Ancient History:

It is believed that in ancient time KANGRA was formed at the time of Mahabharata. Bhumichand founded this Riyasat, at that time Multan (Pakistan) was its capital. 234th king of KANGRA.

Susharma made kangra fort and made Kangra as Capital. He was founder of Kangra. He sided Kauravas during Mahabharata. The hilly area was known as Trigarta which means the land between three rivers i.e Ravi, Beas and Satluj. Banganga, Nugal and Kurali meeting point is also known as Trigatra.

The other part of the Riyasat was called Jalandhar. According to Kaningham, Jalandhar name as derived from Jalandhar Rakshasa, who was killed by Lord Shiva.

Later the hilly part Trigarta is named as Kangra. Kangra means Kan Ka Gad. Lord Shiva killed Jalandhar and his ear fallen here.

Medieval History:

Mahmoud Ghajnavi attacked KANGRA Fort in 1009 and defeated Anandpal and Bhrampal. Jagdish Chand was king of KANGRA at that time. Kangra was under Turk until 1043. Tomar king help kangra to free from Turk. In 1051-52 KANGRA was again under Turk. In 1060 King of Kangra again conquered Kangra Fort.

Mohd. Bin Tuglaq attacked KANGRA in 1337. Prithvi Chand was king at that time. FIROJ SHAH TUGLAQ took 1300 books from jawalaji to France to translate them in Faarsi (French).

Firozshah Tuglaq's son Nasirudin Shah had taken shelter in kangra in 1389, Sansar hand was king at that time. During reign of Megh Chand in 1398 Taimur Lang looted Shivalik and Dhameri.

Then King Hari Chand lost his way during a hunt and went missing for days. There his brother Karam Chand was named the new King. After several days, when Hari Chand returned back, brother karamnd offered him the crown but Hari Chand refused and founded Guleir Riyasat in 1405. Sansar Chand, son of Karam Chand became king in 1430.

As per Tabakat-e-Akbar Khan Jahan conquered Kangra Fort in 1620. Akbar sent Todarmal to measure hilly region. Vidhi Chand in 1589, revolted against Mughal with the help of other kings but lost.

Trilokchand (1605-12) and Hari Chand II (1612-17) were the Kings at the time of Jahangir.

Nawab Ali Khan was first Mughal Killedar of Kangra Fort. Jahangir made mosque in Kangra Fort. Nawab Saif Ali Khan was last Killedar of Kangra Fort.

Modern History:


















Abhay Chand (1747-50) built fort at Thakurdwara and in Teehra in 1748. Ghamand Chand laid the foundation of Sujampur town in 1761. At the time of Ahmad Shah Durani attack over Mughal Ghamand Chand took advantage and recovered all the territory that had been lost by his ancestors to Mughals.

Jassa Singh Ramgarhiya was the first Sikh to attack Kangra, Chamba and Nurpur. Jai Singh kanhaiya defeated him in 1775.

Sansar Chand kept Ishwari Sen, Ruler of Mandi Rasat in jail for 12 years. Amar Singh Thapa freed him. In 1794 he attacked Bilaspur which is responsible for his decline. Amar Singh Thapa defeated him in Mahalmoriya in 1805. After Jawalamukhi treaty between Sansar Chand and Ranheet Singh in 1809 Raja Ranjit Singh defeated Amar Singh Thapa. Sanar Chand gave kangra fort and 66 villages to Maharaja Ranjit Singh. Maharaja Ranjit Singh made Dessa Singh Majithiya as governor of KANGRA FORT and areas of Kangra. Sansarchand died in 1824.

IAS | HAS | PCS | HCS

OUR PROUD FINAL SELECTIONS

 Saurabh Subblik IAS Rank-124 (2017)	 Pankaj Chugh (IAS-2013)	 Naren Khattar (IAS)	 Rishi Arora (IAS-2015)	 Poojita Bansal (IAS-2016) Rank-5	 Dishu Singh (H.S)	 Neeraj Kharbada (PCS)	 Rishu Singh (PCS)	 Shayari Mathotra (PCS)	 Bhuvna Danda (PCS)	 Radhika (H.P.SAS-ALLIED)	 Ravi Singh (H.P.SAS-ALLIED)
 PRIYA NAGTA RANK-3 (HAS) ROLL NO.11903796	 NISHA AZAD TEHSILDAR ROLL NO.11910093	 ARSHIYA SHARMA ETO ROLL NO.11910590	 VINOD KUMAR ETO ROLL NO.12001797	 ASHWANI KASHYAP ETO ROLL NO.11011886	 RISHAB KUMAR ETO ROLL NO.12000636	 SANJAY VERMA AUDIT INSPECTOR (CO-OP SOCIETY)	 KANWAR YUDHBIR SINGH AUDIT INSPECTOR (CO-OP SOCIETY)	 UMESH SARAO AUDIT INSPECTOR (CO-OP SOCIETY)			

HAS MAINS MODEL TEST PAPER

(WITH DETAILED SOLUTION)

GENERAL STUDIES-II

Time Allowed: Three Hours

Maximum Marks: 200

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions.

1. There are 28 questions printed in English.
2. All question are compulsory
3. Candidate should attempt questions/parts as per the instructions given in the section.
4. The number of marks carried by the question /parts as per is indicated against it.
5. All parts of question shall be attempted at the place designated for hem in the question cum answer Booklet. Attempts of part/questions shall be counted in sequential order.
6. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-answer Booklet must be clearly struck off.
7. Candidates are required to write clear, legible and concise answers and to adhere to word limits, wherever indicated. Failure to adhere to word limit may be penalized.

Attempt all question. Answer to Question No. 1 to 15 should not exceed to 60 words in each case. Contents of the answers are more important than their length. Each question carries 4 marks.

1. What is Parliamentary Democracy?

Answer: Parliamentary democracy is a system is which citizens elect representatives to a legislative parliament to make the necessary laws and decisions for the country. In a parliamentary democracy, we have Prime Minister, who is first elected as a member of Parliament, then elected Prime Minister by the other member, the Prime Minister remains a part of the Legislature.

Parliamentary democracy is one of the form of democracy, where government is run by elected representatives of people and legislative work done by them. Government runs by party or coalition which has majority in house.

We have parliamentary democracy also of two type:

One where head of state elected one like India and

Second case is like England where head is monarch.

2. What is the importance of January 26 in India?

Answer: 26 January is historically very important for India, when British rule over India and congress formed by our great leaders to rule out British from India. After 4 decades of experience with British congress finally decide on its annual session in dec 1929 it voted for "PURNA SWRAJ" complete

independence from British. And **finally resolution passed on 26 Jan 1930, under** priesdentship of Nehru and this day also coincident with republic day 26 jan 1950 when constitution of India come in to force and India get its own constitution

3. What factors leads to the Joint-Sitting of Parliament?

Answer: Joint setting of parliament possible when situations of deadlock between the upper house (Rajya Sabha) and the lower house (Lok Sabha) regarding any bill except money and Constitution amendment bills. If after a Bill has been passed by one House and submitted to the other House:

- the Bill is rejected by the other House
- the Houses have finally disagreed as to the amendments to be made in the Bill
- more than six months elapse from the date of the reception of the Bill by the other House without the Bill being passed by it,

Parliament of India is bicameral. Concurrence of both houses is required to pass any bill. The joint sitting of the Parliament is called by the President (Article 108) and is President over by the Speaker or, in his absence, by the Deputy Speaker of the Lok Sabha or in his absence, the Deputy-Chairman of the Rajya Sabha.

4. What is the difference between Developed and Developing countries?

Answer: Developed Countries is mainly used first world countries which are industrialized well and having more per capita income above \$12000. Their consumption is also high because of more income and good in human development indicators Developing Countries. Is mainly used for those countries which are less industrialized than developed one and having per capita income is below Rs12000. They are mainly colonies of above one. They generally don't perform well in human development indicators.

COMPARISON CHART

Basis for comparison	Developed Countries	Developing Countries
Meaning	A country having an effective rate of industrialization and individual income is known as developed country.	Developing country is a country which has a slow rate of industrialization and low per capita income.
Unemployment and Poverty	Low	High
Rates	Infant mortality rate, death rate and birth rate is low while the life expectancy rate is high.	High infant mortality rate, death rate and birth rate, along with low life expectancy rate.
Living conditions	Good	Moderate
Generates more revenue from	Industrial sector	Service sector
Growth	High industrial growth	They rely on the developed countries for their growth
Standard of living	High	Low
Distribution of Income	Equal	Unequal
Factors of production	Effectively utilized	Ineffectively utilized

5. Write a brief account on Raisin Dialogue.

Answer: Raisina Dialogue is an annual conference held in New Delhi. It is envisioned to be India's flagship conference of geopolitics and geo-economics. It is organized on the lines of the Shangri-La Dialogue held in Singapore. It is structured as a multi-stakeholder, cross-sectorial conclave, involving policy and decision makers, including cabinet ministers from various Governments, high-level Government officials and policy practitioners, leading personalities from business and industry etc. The conference is held jointly by Ministry of External Affairs and the Observer Research Foundation (ORF), an independent think tank based in India.

The Raisina Dialogue was born in 2016, in the belief that the Asian century that the world was talking about any exclusive geographical region. It was rather about the engagement of global actors with Asia and of Asia with the world. So this dialogue took birth as a platform where the old and new could work together, to discover their connections, their inter-dependence.

6. What is the meaning of Public Interest Litigation?

Answer: Public Interest Litigation (PIL) is one of the best form of litigation, the Judiciary in India has acquired in order to enforce the legal obligation of the executive and the legislative. It can be defined as litigation involved in the protection of the interests of the public at large. It is generally used to protect group interest and not individual interest, for which Fundamental Rights have been provided. The right to issue PIL is available to the Supreme Court and the High Courts. The concept of the PIL has emanated from the power of judicial review of the Constitution. The relief provided by the Court is usually in the form of direction or order to the State including Compensation to the affected parties.

PIL has succeeded in its original purpose of reaching the helpless. Judiciary has taken up number Social issues illegal detention personal liberty, bureaucratic inefficiency free bonded laborers, and issues of tribal's, slum dwellers, women in rescue homes, Children in juvenile homes, Child labor etc. In Case of environmental pollution and ecological destruction, the Supreme Court has ordered closure of a few factories, banned mining, road Construction, etc.

7. How are Chief Justices of High Courts in India appointed?

Answer: The Chief Justice of a High Court is appointed by the President with the consultation of the Chief Justice of the Supreme Court and the Governor of the State. The other judges are appointed by the will of President, Governor and the Chief Justice of High Court.

Qualifications for the Judges

(a) He should be a citizen of India.

(b) He should have been (i) a judge for 10 years of Subordinate court under the Judicial Service of the State or (ii) an Advocate for 10 years in a High Courts in India (Article 217).

Tenure: Originally the age of the retirement of the judges of the High Courts was fixed at 60 but it was raised to 62 in 1963 according to the 15th amendment of the Constitution.

8. What one most important factor led to unification of Princely States of Himachal Pradesh in the Union of India?

Answer: Himachal Pradesh was formed by the integration of the state of Chamba, Mandi Suket, Sirmaur and the Shimla hill states, minus Bilaspur and Nalagarh. The people of these hill states had long agitated against the despotic rule of Princess their respective Praja Mandals under the aegis of the All India States People's conference.

The leaders consulted the then state's minister, late. Sardar Patel who placed the following alternatives before the popular leaders:

- a) To merge these Hill states with the Punjab
- b) To merge some states with the Punjab and the others with the Uttar Pradesh.
- c) To have union of states Like the one the Princes had set up at Solan
- d) The key role was played by Praja Mandal

The Key role was played by Praja Mandal. The main aim of the movement was democratization of administration. The people of state strove to integrate the princely states after Independence i.e. 1948 and there after in 1965-66 for the integration of Punjab hills with Himachal to create Himachal as a larger hill state. Bhagmal Sautha was main spirit behind the creation of Praja Mandals in hills. He with the help of Dr. Y.S. Parmar organized Himalayan States Regional Council in Shimla. All the local organisations merged with Praja Mandal and forced the ruler of their respective states to accede in the Union of India.

9. What is Good Governance?

Answer: Good Governance is an approach to government that is committed to creating a system founded in justice and peace that protects individual's human rights and civil liberties. According to the United Nations, Good Governance is measured by the eight factors of Participation, Rule of Law, Transparency, Responsiveness, Consensus Oriented, Equity and Inclusiveness, Effectiveness and Efficiency, and Accountability.

Indicators of Good Governance are

- a) Transparency and Accountability
- b) Rule of Law.
- c) Equity and Inclusiveness
- d) Honesty and Integrity.

10. Define the term 'Quasi-Federalism'.

Answer: The constitution of India is neither purely federal nor purely unitary its quasi federal, combination of both. It is a union of composite states of a novel type. Neither the parliament not the state legislation is 'sovereign' because each being limited by the constitutional provisions affecting the distribution of powers. The constitution enshrines the principle that in spite of federalism, the national interest ought to be paramount. Thus, the Indian constitution is mainly federal with unique safeguards for enforcing national unity and growth. But actually Indian constitution contains both features of a federal constitution and unitary constitution.

11. Do we need 'No Detention Policy'?

Answer: As per the No-Detention Policy under the Right to Education Act, no student can be failed or expelled from school till the completion of elementary education covering classes 1 to 8. Seeing the current scenario of high dropout rate in classes 9th and 10th, Government should reconsider the policy of No-Detention. Stemming dropouts from the schools due to peer pressure was the main reason the Right to Education Act included the no-detention provision. If it is reversed, many students would stop going to schools when they fail.

The section 29(2)(h) of the RTE Act makes a comprehensive and continuous evaluation (CCE) mandatory, wherein schools are expected to use test results to improve teaching and learning of the child. Unlike traditional board examinations, the CCE visualizes evaluation as a diagnostic tool to improve learning. So scrapping the policy is not a solution, in fact, it should be modified and corrected.

12. What is COMCASA?

Answer: Communications Compatibility and Security Agreement (COMCASA)

- COMCASA is one of three foundational agreements that guide US high technology cooperation in defence sector with other countries.
- It was earlier called Communication and Information on Security Memorandum of Agreement (CISMOA) before name was changed to reflect its India-specific nature.
- Other two agreements are
- Logistics Exchange Memorandum of Agreement (LEMOA)
- BECA.
- COMCASA is **meant to facilitate use of high-end secured communication equipment** to be installed on military platforms being sold to India by US to fully exploit their potential.
- It essentially provides legal framework for transfer of communication security equipment from US to India that will facilitate interoperability between armed forces of both countries and potentially with other militaries that use US-origin systems for secure data links.
- Interoperability in this case means that there will be access to encrypted and secret technologies or communications.
- India is currently dependent on commercially available and less secure communication systems on high-end US defence platforms like C-130Js and P8I maritime surveillance aircraft.

13. What is the difference between Growth and Development?

Answer: The terms Growth and Development are used with every aspect of life. There might be some confusion when using the terms as they are often used interchangeably. Growth is just 'getting bigger', whereas development is improvement.

Growth can be explained as becoming bigger or larger or having more importance. Growth is termed as a physical change, where as development is said to be physical as well as social or psychological change. Development also means transformation or improvement. While growth is related to quantitative improvement, development is related to quantitative as well as qualitative improvement.

14. What is vote-on-Account?

Answer: Vote on Account is a grant in advance to enable the government to carry on until the voting of demands for grants and the passing of the Appropriation Bill and Finance Bill. This enables the government to fund its expenses for a short period of time or until a full-budget is passed. Normally, the Vote on Account is taken for two months only. The sum of the grant would be equivalent to one sixth of the estimated expenditure for the entire year under various demands for grants.

As a convention, a vote-on-account is treated as a formal matter and passed by Lok Sabha without discussion. During election year or when it is anticipated that the main Demands and Appropriation Bill will take longer time than two months, the Vote on Account may be for a period exceeding two months.

15. Define 'Point of Order'.

Answer: A Member can raise a point of order when the proceedings of the House do not follow the normal rules of procedure. A point of order should relate to the interpretation or enforcement of the Rules of the House or such articles of the Constitution that regulate the business of the House and should raise a question that is within the cognizance of the Speaker. It is usually raised by an opposition member in order to control the government. It is an extraordinary device as it suspends the proceedings before the House. No debate is allowed on a point of order.

Attempt all questions. Answer to Question No. 16 to 25 should not exceed to 120 words in each case. Contents of the answers are more important than their length. Each question carries 8 marks.

16. How does the Indian Parliament exercise control over the Union Executive?

Answer: Union executive is part of parliament, and later controls the former through in several ways like through Financial control, Administrative control, legislative control, collective and individual Responsibility, Representative control, control through inform control by suggestions.

Financial Control: The Government is required to pass budget and financial bill in both the houses. Parliament does not allow the Government to expense unnecessarily. The Government cannot withdraw any amount of money from the consolidates fund without Parliamentary authority.

Administrative Control: Generally, Parliament does not interfere in Administrative matters but if any policy is formed in wrong way, parliament may ask for explanations.

Legislative Control: While enacting any law in Parliament, the Government needs to explain its all provisions and answer questions asked by the members of a parliament. Thus, it does not allow the executive to enact any arbitrary acts.

Collective and Individual Responsibility: The whole council of ministers is answerable to lok Sabha for any step taken by any of the minister of the council of ministers. Even the minister is answerable individually to the Lok Sabha for steps taken by his officials of his department. If Lok Sabha does not approve the act of the minister. The whole cabinet has to resign, because of collective responsibility.

Representative Control: Members of Parliament represents different sections of people. They ask questions to the executive as representatives.

17. Describe the doctrine of Colorable Legislation.

Answer: DOCTRINE OF COLOURABLE LEGISLATION

It is based on the maxim that what cannot be done directly cannot also be done indirectly. It is only when a legislature having no power to legislate frames legislation in a way that it is camouflaging the same as to make it appear to fall within its competence, the legislation thus enacted may be regarded as colourable legislation.

Doctrine of Colourable Legislation and Legislative Accountability, in a Parliamentary system, unlike the Presidential system, lays emphasis on accountability. According to the scheme of our Constitution, an indirect Separation of Power exists in India, which means a balance has been made between the different components of government i.e. between Legislature, Judiciary and Executive. The primary function of Legislature is to frame laws. Whenever, Legislature tries to shift this balance of power towards itself then Doctrine of Colorable Legislation is applied to take account of Legislative Accountability.

18. What steps are taken by the Govt. of India to improve the effectiveness of interventions in its developmental Policies?

Answer: The government of India has following strategy to improve the effectiveness of its interventions.

1. One of the strategies has been to target specific services. For instance, during the last decade, a number of programmes were initiated that aimed at improving the social services, or services relating to health, education and income opportunities for less advantaged in society, such as MGNREGA, NRHM, SSA, ICDS. Additionally, focus on social sector development will also address the objectives of human development and inclusive justice.
2. Another related strategy is the identification of the concentration of deficiencies among certain socio-economic groups, geographic groupings, gender, and demographic classes. This recognition has led to targeting of programmes to specific groups of populace.
3. Since convergence of interventions also improves the effectiveness of each intervention, government has gone about a multi-pronged intervention strategy. Such as offering access to health as well as education together with laying down critical infrastructure addresses multiple deficiencies concurrently.
4. Other strategy of government is to make better institutional arrangements and espousal of innovative technology solutions for effective and efficient service delivery. For instance, e-governance, DBT, PPP mode, partnering with NGOs.
5. Establishing collaboration between public and private sector providers of social services.

19. What is BIMSTEC?

Answer: Formed in 1997, The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Co-operation is an international organisation of seven nations of South Asia and South East Asia.

Two land-locked states are — Nepal and Bhutan — five of them are from South Asia — India, Bangladesh, Nepal, Bhutan, Sri Lanka — and two from South East Asia — Myanmar and Thailand.

The BIMSTEC region is home to around 1.5 billion people which make up for around 22% of the world's population. The region has a combined gross domestic product (GDP) of \$2.8 trillion.

The cooperation within BIMSTEC will be based on respect for the principle of sovereign equality, territorial integrity, political independence, non-interference in internal affairs, peaceful co-existence and

mutual benefit. This cooperation within BIMSTEC will constitute an addition to, and not be a substitute for, bilateral, regional or multilateral cooperation involving the member states.

Seven members of BIMSTEC have so far identified 14 priority sectors. Each country leads one or more areas in a voluntary manner. India leads two — counter-terrorism and transnational crime, telecommunication and transport. But there has been a view that the proliferation of commitments didn't yield tangible results over the past two decades and the regional grouping should trim its list of priorities.

20. Critically evaluate the undermining of SAARC by India.

Answer: The SAARC, a regional intergovernmental organization established in the year 1985 for economic and regional cooperation. However, as a regional grouping, it has failed to succeed its mission.

India is not the sole reason for undermining SAARC; It is Pakistan's rivalry towards India.

- 1) Pakistan increasing terrorists' attempts to target India, primarily on Kashmir issue (made India to withdraw from summit recently) despite repeated efforts by India to seek resolution.
- 2) Resulting which India and Pakistan could not come on common grounds unlike Germany and France come together despite indifferences.

And there are also other important reasons

- 1) **Weak cultural ties**- Failure to maintain the distinct cultural heritage and bringing togetherness on cultural lines
- 2) **Regional problems** – India-SL on Kachatheevu island, Pakistan-Afghanistan political strain, B'desh and Pak historical strains, political instability in Afghanistan, military rule in Pakistan, India-Nepal leap-bounds relations
- 3) **Trade and non trade barriers**-SAFTA-no major trade happening due to sensitive list, Pakistan's negligence to give MFN status to India citing baseless security reasons.
- 4) **SAARC charter** – does not allow bilateral talks, due to which the disputatious issues continue to simmer.
- 5) **Unresolved border and maritime issue** have led to problems of Terrorism, Refugee Crisis, Smuggling, Narco-Trade.

India, being a major economy in SAARC grouping should play a major role in bringing the countries together to foster peace and harmony and implementation on Gujral doctrine should be considered balancing the efforts to countervail the major like terrorism and border issues.

21. What role is played by India Diaspora in India's foreign Policy?

Answer: All the persons of Indian origin who have gone to foreign lands for gainful employment and those who have settled there having established various types of enterprises can be called Indian diaspora. According to an estimate approximately eight million Indians are living in countries of the world. Although America, France, England, Australia are their favourite countries, and middle-east and south-east Asia are their other favourite regions, the persons of Indian origin are scattered in all parts of the world.

Diaspora activities that impact Socio- Economic Development

Remittances: The principal focus with respect to the economic effects of Diaspora on the country of origin has been on their substantial financial contributions through remittances – private transfers from

migrants to their families. According to the World Bank remittances can (i) reduce recipient household poverty, with spill over to other households; (ii) increase investment in education and health as well other productive activities; (iii) reduce child labour; and (iv) increase entrepreneurship.

Investment: Beyond remittances, Diasporas contribute to the economic development of their country of origin through Foreign Direct Investment (FDI) and transnational entrepreneurship, including support for entrepreneurs, start-ups and small businesses in the country of origin.

Diasporas' Knowledge Transfer: The constructive contributions of Diasporas to development in their country of origin are transfer of acquired knowledge. These Diasporas are a great source of transfer of technical knowledge and skills in the form of 'brain gain'. Where knowledge exchange is concerned, Diaspora members can act as important interlocutors between the technology and country of origin. They can contribute these through not only permanent repatriation but also through short- term return.

22. How the Government of Himachal Pradesh is curbing drug menace?

Answer: About **27 per cent** youth in Himachal Pradesh are involved in drug abuse. Himachal Pradesh, like neighboring Punjab, is facing a deadly menace of drugs and narcotics. In just three months, 274 narcotic-related cases were registered and 320 people were arrested according to police record. 230 kg charas was seized from drug peddlers this year.

Himachal Pradesh Government is determined to curb the problem of drug abuse in the State. Drug abuse continues to be a serious social problem across the State and country.

The State Government has taken stringent steps against cultivation and eradication of these drugs generating plants. Campaign for the eradication of Cannabis/Opium is being carried out on all lands including Gram Panchayat, forest, PWD, IPH, Agriculture, Horticulture lands, roadsides, etc. The Cannabis/ Opium Eradication campaign is being implemented in the entire State in effective manner. In order to intensify the Cannabis/Opium Eradication campaign the State Government has also deployed Sashatra Seema Bal (SSB) for addressing the issue in high altitude regions and provided them with modern equipments for cannabis/opium destruction.

As part of a Special Task Force, three State Narcotics Crime Control Units at Shimla, Kangra and Kullu have been set up to deal with drug mafia.

In the wake of rising drug menace in the state, the Himachal Pradesh government has proposed to introduce a chapter on ill - effects of drug abuse in the syllabus of government schools, starting from the next academic session.

23. What steps are taken by the state of Himachal Pradesh to control Cyber Crime in Himachal?

Answer: Cyber Crimes are a new class of crimes to Himachal rapidly expanding due to extensive use of internet. With the evolution of the Internet, along came another revolution of crime where the perpetrators commit acts of crime and wrongdoing on the World Wide Web.

Implementation of IT policy, 2000 so, that with the enhancement and improvement of information technology sector there must be steps taken to tackle the cyber issues. By creating cyber laws Himachal Pradesh is committed to ensuring that the overall local regime is in consonance with the requirements of transactions and interactions in the electronic medium.

Himachal launches State Cyber Crime Police Station to deal with high-tech cyber criminals, digitally inaugurated State Cyber Crime Police Station at the State Police Headquarter in Shimla. The main objective of this Cyber Crime Police Station is to deal with increasing crime based on misuse of information technology (Cyber Space) by the High-tech criminals, The facility will be provided necessary technical assistance in apprehending the suspects and collection of digital evidence on all issue of cyber crime.

The centre for cyber security for investigation and innovation will be set up at the state Police Headquarters in Shimla. Best technical support from the entire state will be brought under one roof to develop synergy and keep constant vigil on cyber space.

24. What is Mekong Ganga Cooperation? What is its significance?

Answer: The grouping brings together various nations of the Rivers Ganga and Mekong region for economic cooperation. Origin and Development the proposal for the formation of the Mekong-Ganga Cooperation (MGC) was finalized by the foreign ministers of the six members at the sidelines of the ASEAN Ministerial Meeting (AMM) in Bangkok, Thailand, in July 2000. The grouping was formally launched on November 10, 2000 in Vientiane, Laos, after the Vientiane Declaration, outlining the basic theme of the Cooperation, was signed by ministers representing the six member-countries.

The MGC aims at developing closer relations and better understanding among the member-countries to enhance friendship, solidarity and cooperation; facilitating inter-state movement and transit transport of goods and people in the region; creating necessary infrastructural facilities in the Ganga-Mekong basin areas, and encouraging active participation in poverty eradication. The inaugural meet in November 2000 identified tourism, culture and the development of human resources as the first steps on a road that will lead to greater networking of communications, transport and infrastructure development. In the tourism field, the MGC is committed to conducting strategic studies for joint marketing, launching the Mekong-Ganga Tourism Investment Guide, facilitating the travel of the people in the region, expanding multi-modal communication as well as transportation links to improve travel and tourism and promoting cultural-religious package tours. In the field of infrastructure development, member-countries are committed to develop transport networks, especially the "East-West Corridor" and the "Trans-Asian Highway".

25. What is role of Judiciary in India?

Answer: The judiciary in India comprises the Supreme Court at the apex. The States have High Courts (in some cases two or more States have a common High Court). Down below there are District Courts and below them the courts at lower levels.

The interest of the people is further safeguarded by the existence of an independent judiciary. As guardian of the Fundamental Rights and the watchdog of the constitutional provisions, the judiciary has powers to declare void any legislation that in its opinion is violative of the provisions of the Constitution of India.

The power of judicial review ensures that neither the Legislatures nor the Executive can ride rough over the rights and interests of the people of India. In the case relating to the OBCs referred to earlier, the Supreme Court held the legal validity of the order but asked the government to make certain modifications in the original order.

A distinguishing feature of the Indian judiciary is that it is totally independent of the Executive. The judges of the High Courts and the Supreme Court are appointed by the President in consultation with the Chief Justice of the Supreme Court and on the advice of the Prime Minister. The system has functioned well all these years. There are no instances where the executive could have tinkered with the functioning of the judiciary.

While the people of India have their reservations about the fairness of government actions, they have complete faith in the judiciary. This is good for the health and survival of democracy in the country.

Attempt all question. Answer to Question No. 26 to 28 should not exceed to 400 words in each case. Contents of the answers are more important than their length. Each question carries 20 marks.

26. Discuss the evolution of Indian Constitution.

Answer: The Constitution of India is the product not of a political revolution but of the research and deliberation of a body of eminent representative of the people. The Constitution of 1949 differs from constitutional documents of the proceeding two centuries is that while the later had been imposed by an imperial power; the Republican Constitution is made by people themselves.

CONSTITUTIONAL DEVELOPMENT:

Regulating Act of 1773: Its landmark act in Indian History which has constitutional importance as it laid the foundations of central administration in India, direct access of the East India Company in India and recognized the political and administrative functions of the Company.

Pitt's India Act of 1784: In order to rectify defects of 1773 act, the then prime minister of England William Pitt introduced this act in 1784. This act gained importance because for the first time, the company's territories were called the British possessions and also the **British Government was given supreme control over company's affairs and its administration in India.**

Charter Act of 1813:

- The Company's monopoly over Indian trade terminated; Trade with India open to all British subjects.
- Beginning of a Central legislature for India as the act also took away legislative powers of Bombay and Madras provinces.

Charter Act of 1833:

- This was the final step towards centralization in the British India.
- Beginning of a Central legislature for India as the act also took away legislative powers of Bombay and Madras provinces.

The Act ended the activities of the East India Company as a commercial body and it became a pure administrative body.

Charter Act of 1853:

- **The legislative and executive functions of the Governor-General's Council were separated.**
- 6 members in Central legislative council. Four out of six members were appointed by the provisional governments of Madras, Bombay, Bengal and Agra.

Indian Councils Act of 1861:

It introduced for the first time Indian representation in the institutions like Viceroy's executive + legislative council (non-official). **3 Indians entered Legislative council.**

- It accorded statutory recognition to the portfolio system.

- Initiated the process of decentralisation by restoring the legislative powers to the Bombay and the Madras Provinces.

India Council Act of 1892:

It paved a way for democratic institution in India.

- Introduced indirect elections (nomination).
- Enlarged the size of the legislative councils.
- Enlarged the functions of the Legislative Councils and gave them the power of discussing the Budget and addressing questions to the Executive.

Indian Councils Act of 1909:

- Direct elections to legislative councils; first attempt at introducing a representative and popular element.
- It changed the name of the Central Legislative Council to the Imperial Legislative Council.

Government of India Act of 1919:

The Act introduced, for the first time, ***bicameralism at center***.

The Central subjects were demarcated and separated from those of the Provincial subjects.

Government of India Act of 1935:

The Act provided for the establishment of an All-India Federation consisting of the Provinces and the Princely States as units, though the envisaged federation never came into being.

- **Three Lists:** The Act divided the powers between the Centre and the units in items of three lists, namely the Federal List, the Provincial List and the Concurrent List.

The residuary powers were vested with the Governor-General.

Provided for the establishment of Federal Court.

Indian Independence Act of 1947: It declared India as an Independent and Sovereign State.

Established responsible Governments at both the Centre and the Provinces.

It assigned dual functions (Constituent and Legislative) to the Constituent Assembly and declared this dominion legislature as a sovereign body.

All the above acts paved the way for formation of democratic political institution at centre and shelling out powers to all the organs through the Constitution.

The Constitution of India was strengthened through various sources.

The framework was laid by ***Government of India Act of 1935 and philosophical moorings were attached from many countries.***

A few Examples are-

Fundamental Rights were taken from the Constitution of United States.

Rule of Law was taken from British Constitution.

DPSP: Irish Constitution.

Fundamental Duties: Soviet Union.

27. What is meant by Sovereignty of Parliament? Consider whether the Indian Parliament is a sovereign body.

Answer: Parliamentary sovereignty is a principle of the UK constitution. It makes Parliament the supreme legal authority in the UK, which can create or end any law. Generally, the courts cannot

overrule its legislation and no Parliament can pass laws that future Parliaments cannot change. Parliamentary sovereignty is the most important part of the UK constitution.

Though the Constitution of India adopted the language of Britain in describing its Legislature at the Centre, and makes the President, like the Monarch of Britain, a constituent part of Parliament, yet the Indian Parliament is not a sovereign legislature like the British Parliament. It functions within the bounds of a written Constitution setting up a federal polity and a Supreme Court invested with the power of judicial review.

The legislative competence of Parliament is limited, during normal times, to the subjects enumerated in the Union List and the Concurrent List in the Seventh Schedule of the Constitution. Besides, its supremacy within its own sphere of jurisdiction is limited by the Fundamental Rights guaranteed to the citizens in Part III of the Constitution.

Article 13 Clause (2) prohibits, subject to specified restrictions, the State from making any law which would take away or abridge any of the Fundamental Rights. Where the State makes a law in contravention of the Fundamental Rights, that law shall, to the extent of contravention be void.

In Britain no formal distinction is made between constitutional and other laws and the same body, Parliament, can change or abrogate any law whatsoever and by the same procedure. The Constitution of India, on the other hand, makes a distinction between statutory law and constitutional law and prescribes a special procedure for amending the latter as incorporated in Article 368.

The Supreme Court held in *Keshavananda Bharati v. the State of Kerala* that Article 368 does not enable Parliament to alter the 'basic structure' or framework of the Constitution. The term basic structure is a vague and general term and the Judges themselves did not offer a common agreed meaning.

Ivor Jennings points out that parliamentary supremacy in the modern world is synonymous with unfettered power of the executive. Much of the business of Parliament is initiated by the government. And so long as the ruling party has majority, the government is in complete control of the House of the People. The Constitution certainly makes the Council of Ministers responsible to the Lok Sabha, but a ruling party with a comfortable majority has little to fear from this stipulation.

Furthermore, India is a federation; as such, there is a separation of powers, and State Legislatures exist as independent legislative bodies. Thus it cannot be accepted that Parliament is sovereign.

28. Discuss the role of NGO in Indian Society.

Answer: NGOs are voluntary organizations. These are popularly known as NGOs because they are free from governmental control in their functioning. They are democratic and open to all those wishing to become member of the organization voluntarily and serve the society.

Therefore, they have assumed a significant space in civil society, which is fast emerging today due to the weakening of the state. NGO is a popular term, which has gained currency at global level and commands respect in society due to its welfare services in society. The organization does seek financial assistance from the government but it operates, at least theoretically, on its own principles and programmes.

NGOs are composed of experts with years of experience in executing social welfare activities. Before rolling out a project, detailed analysis of the situation is done and possible solutions are contemplated.

Collaboration with civic agencies and other government agencies (at district, state and even national level at times) is done to carry out the work.

NGOs not only go on the ground to address these issues, they also undertake massive campaigning activities to generate awareness on these issues. In today's time, NGOs are efficiently leveraging the power of social media to disseminate information about their work and reach more and more people.

India has made rapid progress in the socio-economic sphere in the last seven decades. Millions have been brought out of poverty, life expectancy has shot up, literacy rate has almost tripled and people have better access to healthcare services. However, given the vastness of India, both in terms of demography and area, and its socio-cultural diversity, millions are still bereft of a decent life. Even today, numerous people struggle to get basics such as health, shelter, education and nutritious food. The benefits of India's economic progress have not been uniform in nature. There is rampant economic inequality. This is where NGOs come into the picture. Their job is to plug the gaps left by the government by improving the lives of the most marginalized communities.

In India, NGOs undertake a variety of activities, most of which are aimed at improving the socio-economic status of communities with limited means. From providing direct benefit (like distributing nutrition feed to malnourished children) to enabling and empowering people (like making a community realize the importance of sending their children to school), the work of NGOs has a far-reaching impact in helping underprivileged and deprived people march ahead in life.

Way Forward:

NGOs need to be transparent in their work and ensure that the funds raised benefit those for whom they are intended. This is a good trend, larger and more accountable NGOs will be able to deliver more effectively and efficiently, making best use of resources. NGOs are already proving to be agents of change. In times to come, they will continue to play a significant role in helping large sections of the Indian society come out from the quagmire of poverty and distress.

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HAS MAINS MODEL TEST PAPER

(WITH DETAILED SOLUTION)

GENERAL STUDIES-III

Time Allowed: Three Hours

Maximum Marks: 200

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions.

1. There are 28 questions printed in English.
2. All question are compulsory
3. Candidate should attempt questions/parts as per the instructions given in the section.
4. The number of marks carried by the question /parts as per is indicated against it.
5. All parts of question shall be attempted at the place designated for hem in the question cum answer Booklet. Attempts of part/questions shall be counted in sequential order.
6. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-answer Booklet must be clearly struck off.
7. Candidates are required to write clear, legible and concise answers and to adhere to word limits, wherever indicated. Failure to adhere to word limit may be penalized.

Attempt all question. Answer to Question No. 1 to 15 should not exceed to 60 words in each case. Content of the answers are more important than their length. Each question carries 4 marks.

1. Discuss the Social and ethical issue on use of Biotechnology.

Answer: Social issues

1. Harm to the environment
2. Bioterrorism like infectious viruses
3. Effect on the fertility of land
4. Can affect our future generation
5. Can preserve the DNA of extinct plant & animals for smoother ecosystem
6. BT cotton like crops only in non-consuming crops should be promoted for better economy.

Ethical issues

1. The animal sights on which experiments done.
2. It leads to an artificial life
3. Life extension & cloning animals, ponds
4. Disrupt the nature positives
5. Population control
6. Increase quality of healthcare
7. Can reduce disability

2. Discuss the Demographic profile of H.P. Answer: As per details of 2011 census:

- Total population = 68,64,602.
- Decadal growth = 12.84 %
- Population form 0.57% of India total population
- Sex ratio = 972
- Child sex ration = 906
- Literacy rate = 89.80%
- Male literacy = 89.53 %
- Female literacy = 75.93%
- Total area = 55, 673 sq km out of which 45318 sq km is measured
- Hinduism is majority in state with 95.17% of follower
- Islam with 2.18 %
- 89.97% of population live in villages
- 10.03 % urban population
- Birth rate = 16.5 %
- Death rate = 6.7%

3. Outline the important programme and mission of ISRO. Answer: important programme are-

1. CARTOSAT – 2 launched on PSLV -37 launching 104 satellites in 2017.
2. ISRO screamjet engine technology demonstrator 2016.

Important Mission-

1. Gaganyaan mission by 2022- Indian astronauts to go into space major millstone mission by ISRO using GSLV MK-III.
2. Mars orbiter mission – 1st inter-planetary mission completed two years in its orbit around mars.
3. ASTROSAT mission-it is multi-wavelength astronomy mission on an IRS satellite into a near earth equatorial orbit.
4. Multi Application Solar Telescope (MAST).

4. Policy made by GOI to promote non- conventional source of energy in India

Answer: Policy made by GOI to promote the non conventional source of energy in India

India is 4th largest consumer of energy after U.S.A national energy policy

1. National Bioenergy mission- model based on biomass.
2. National offshore wind energy policy- use of wind energy
3. National solar mission implement – 8.8 GW.
4. National Hydro Policy
5. Establishment of IREDA (1987) to increase foreign investment in renewable energy
6. Bank loans for Solar rooftop
7. Surya mitra scheme – aims of developing skill in youth to harness the energy.
8. Introduction of Green Tax.

5. Discuss National Action plan for Climate change. Answer:

- Released in 2008.

- This plan identifies "eight core national mission".
- **Eight missions including:**
 1. National solar mission
 2. Water mission
 3. Bio energy mission
 4. Mission on sustainable habitat
 5. Mission for sustaining Himalayan ecosystem
 6. Mission for green India
 7. Mission for sustainable agriculture
 8. NMSKCC.
- NARCC identifies erasures that promote our development objectives while yielding co-benefits for addressing climate change effectively
- Goal of attaining 1000 MW of solar power
- Include power production from waste
- Goal of improvement in water use efficiency
- Expanding forest cover from 23% to 33 %.

6. Discuss religious tourism in H.P?

Answer: Himachal is the Home of some of the important highly spiritual places devotees make yearly visit to attain blessing. It gave shelter of Hindu, Buddhists as well as Christian shrines. The religion centre of a state are not popular for the religion significance but also for their beautiful & peaceful surrounding. The architectural beauty of pilgrimage centre also reflects the heritage of state.

The tourism contributes majorly 6 % of the state GSDP.

The religion sites like Chamunda devi, Brijeshwar temple, Bhimakali, the church (Shimla) Buddhist monastery are major attraction.

7. Woes of Pong Dam oustees caused due to Pass over of Rajasthan govt.

Answer: Pong Dam reservoir which provides water for irrigation by Indira Gandhi canal, affected 339 villages displacing 2 lakh lives. Large part of Haldon valley also got submerged.

Planning commission decided 15.62 acr to each out see family with basic amenities like housing, road, water supply, electricity.

But the murrabas allotted to them along international border where there is lack of basic infrastructure & lack of proper drinking water. Local people also passed the outsees. Many outsees not found name in colonization act 1972. Pong dam vishthpit samiti in H.P govt. took matter with Rajasthan & also demanded for compensation in monetary terms.

8. Discuss Biotech Policy of H.P. Answer:

- Biotechnology defined as the application of science and technology to living organism.
- Modifying organism to create new & practical application for agriculture, medicine, industry
- Policy mission (2014)
- To convert H.P. into a prosperous Himalayan Biobusiness Hub with biotechnology.

Vision

- Promotion of biotechnology through its application in agriculture, husbandry, medicine, biodiversity conservation.

Objectives

- To upgrade infrastructural support to R&D. to commercially explain bio sources.
- Sate is already in the process of setting up Bio technology park at "Aduwal" in Nakigarh.

9. Evaluate the Characteristic of Indian Economy.

Answer: Indian economy is mixed form of economy & is developed economy with 6th largest in world.

Some features of Indian Economy:

1. Low per capita income
2. Heavy population pressure
3. Excessive dependence on agriculture
4. Chronic unemployment
5. Poor rate of capital formation
6. An emerging market
7. Federal in character- Both state & centre are growth drives
8. Fast growing service sector
9. Large domestic consumption.

10. Discuss the Agriculture Policy of H.P.

Answer: Agriculture its allied sector contributes nearly 20 % of state GSDP & provides direct employment to around 70 % working population.

Govt. policy-

- Quality seed multiplication- 38 seed multiplication farms, kharif & rabi seeds produced.
- Distribution of fertilizer- NPK 15:15:15, NPK 12:23:16 with 25 % subsidy
- Soil testing centre – 11 soil testing centre.
- Commercial crop- emphasis laid on production on off season vegetable, potato, ginger.
- Agriculture market – market information & 52 markets are functional.
- HP crop diversification project under JICA
- Agriculture research & education: more research & development
- Scheme like Dr. Y.S. Parmar Kisan Swarogir Yojna.

11. Evaluate the vision and scope of Horticulture in H.P.

Answer:

Vision-

- The need based and farmer oriented development
- Expansion of diverse crops & fruit, vegetable.
- The state offers vast scope for fruits. Like apple, citrus, sub tropical fruits.
- Due to typical agro climate condition.
- Setting up of nurseries, tissue culture units for production of quality seed.
- Protected cultivation i.e. poly house & grow off season vegetable
- Mechanization techniques introduced helped by JICA

- Area of expansion i.e. new orchards, gardens, flower.

12. Discuss the HDI index in Reference of H.P. Answer: HDI include 5 components as per UNDP.

1. Human capability
2. Widening of choice
3. Enhancement of freedom
4. Fulfillment of human rights
5. Opportunity well being 1stly given by –Mahub-UI-Haq.

All these five component are at good level in Himachal. 1987-88 – 5th rank

1993-94 – 7th rank 1999-2000 – 5th rank 2004 -5 – 4th rank 2009-10 – 3rd rank 2011-12 – 3rd rank

13. Critically examine the Industrial Policy of H.P.

Answer: Industrial policy

Vision-

To promote and inventors industry led by creating a conducive climate which enables environment sustainable and inclusive development, generate income and provides employment. but on Grass root level this vision seems to be a failure because there is

- No care of environment is taken example cements plants in HP
- Inclusive development not seen example no advertisement for famous Kangra tea.
- Not much promotion of MSME
- Policy needs many reforms with special provision for environment and making special economic zone in the every district in particular potential

14. Explain Demographic dividend.

Answer: Demographic dividend means economic growth potential that can result from shapes and population age structure mainly when the share of the working age population is larger than the not working a share of the population

Demographic dividend coined by David Bloom in 1921 is called the demographic divide in India.

Five countries are in stage of demographic dividend where death rate is more than their birth rates that is in Germany, Japan, Estonia, Portugal

India has a big huge population with about 64.4% of its population

15. Discuss Pollution Control Act and Roles?

Answer: United Nation conference on human environment held in Stockholm in 1972 article 51 (A)(g) it shall be the duty of every citizen of India to protect and improve the natural environment including forest lakes river and wildlife have compassion for living creature

Pollution related acts belong to water air and environment only

1. The water prevention and control of pollution act of 1974 state pollution control board should establish.
2. The air prevention and control of pollution act of 1981. United Nation conference on human environment at Stockholm 1972 Parliament enacted the nation by their main objective of this act was to improve the quality of air and to prevent control Air Pollution Control

3. Environment protection Act 1986- in the wake of Bhopal tragedy that the government production act of 1986.
4. Wildlife Protection Act 1972- provides for: state wildlife advisory board establishment of sanctuaries and national park regulation of trade in wild animal, animal products judicial impost penalties for violating the act.
5. Forest conservation act 1980 forest Act was enacted in 1927 at deals with the four categories of forest namely reserve forest protected forest and forest and private forest.
6. Biodiversity act 2000- The legislation aim at regulating access to biological resources so as to ensure equitable sharing of benefits arising from the US notifying national heritage sites.
7. National green tribunal act 2010- it was enacted under the India's constitutional provision of article 21 which shows the citizen of India the right to healthy environment NGT is mandated to dispose the cases within 6 months of the respective appeals.
8. Wetlands conservation and management rules 2010- ensure that there is no further degradation of wetlands the rules specific activities which are harmful to Patna such as industrialization, construction, prohibits these activities in the wetlands.

Attempt all questions. Answer to Question No. 16 to 25 should not exceed to 120 words in each case. Content of the answers are more important than their length. Each question carries 8 marks.

16. Discuss India achievement in the field of Space Science and Technology.
How the application of this technology has helped India in its Social- economic Development.

Answer: Milestone achievement-

1. Mars Orbiter mission- launched in 2014 - successfully placed into an elliptical Orbit around mass. ISRO became 4th agency to do so.
2. Navigation satellite- IRNSS- 1C 3rd Navigation satellite Systems.
3. India's first multi wavelength observatory in space. ASTROSAT launched by PSLV 30.
4. Aries largest optical telescope in Nainital (Asia). application of Technology helping in development.
 - Identifying the water bodies in tribal dominated distress which could be a developed to culture fisheries.
 - Monitoring and evaluation of developed activities in the water Shades.
 - Space based information support for decentralized Planning.
 - Conservation of Heritage Sites.
 - Automated warnings at unmanned level crossing.
 - Access to weather and climate information.
 - Data connectivity of rural India.
 - Bhuvan geo-portal.

Many nuclear related Technologies like pressurized heavy water reaction which is used by uranium generate the electricity meets the economic and social needs of the country.

- Radio navigation is used at Indian airports.
- New sources of water and other mineral can be traced.
- Use of drone technology to curb the evils in society.

- Market for Drone in India leads of financial inclusion.

17. What problems are being faced by the Power Sector in India? Discuss the reform when have been Imitated recently to meet the Energy crisis in India.

Answer: Power sector mainly governed my ministry of power. There are three major pillars of power sector these are 6 generation transmission & distribution. India is world's 6 largest energy consume accounting 3.4 % of global energy consumption by end of 2012. Installed power generation capacity is 210951.72 megawatt and total demand for electricity to cross 950, 000 MW by 2030

Energy sources distribution

- 65% electricity generated by thermal plants
- 22% by hydropower plants
- 3% by nuclear power
- 10 % by alternate sources
- 5 key challenges facing energy sector

Fuel securities content not much resources and dependent heavily on coal.

- Financial health of state discoms in state of debt.
- Underprocurement of power by State poor financial health.
- Inimical financing environment higher ends of tariff.
- Policy paralysis too many loopholes need reforms.
- Electricity losses during Transmission and distribution is high about 28.44%.

Government initiatives

1. A major trust to solar powered by 2020 meet 20000 megawatt.
2. Shale gas exploration as an alternative fuel government allows research and development in this sector.
3. Public private partnership model.
4. Increase in funding.
5. Use of electric vehicle to reduce burden and on petroleum export.
6. Increasing financing facility facilities to the power sector
7. Setting up new nuclear and thermal plants.
8. National biofuel, off shore energy introduced

18. Briefly explain the Sectoral distribution of gross state domestic product of H.P.

Answer: As per quick estimate the value of GSDP of Himachal at current prices 1, 24,235 crore during 2016-17.

The structural analysis reveals that during 2016-17 the percentage contribution of

1. Primary sector is 16.01
2. Secondary sector is 39.96
3. Transport communication and trade 12.03 %
4. Community and personal services 16.0 21.

Primary sector

- Agriculture and animal husbandry -5.3 %
- Forestry and lodging 9.3 %

- Fishing 5.8%
 - Mining and quarrying 12.7%
- Total is equal to minus 0.7 %

Primary sector during 2016 and 17 witnessed negative growth rate of 0.7%

Secondary sectors

- Manufacturing 7.1 %
 - Construction 5.4%
 - Electricity gas water supply 2.9%
- Total – 6%

Secondary sector growth of 6% during 2016-17 but manufacturing sector shows a decline in 2016-17 as for previous year

Tertiary Sector

- Transport communication and Hotel 8.2%
 - Finance and real estate 5.8%
 - Community and Personal service 18.1%
- Total – 10.7%

The Total share of tertiary sector in GDP for year 2016-17 is 44.03%

19. Give an account of the strategies for efficient use of clean and environment friendly energy sources.

Answer: The most efficient clean and environment friendly energy sources are renewable sources. Energy is the key to development and some environmental friendly resources are

Solar energy- available in very large amount and is considered a major feature source of energy.

Photovoltaic- conversion of solar energy into electric energy. Solar thermal power system, the potential of solar power in our country is excess to be 750 GW.

Hydro energy- generation of electricity by using force of water. India is blessed with intense amount of hydro electric potential and ranks 5 in global scenario.

Wind energy- is the kinetic energy associated with the movement of atmospheric air. The Indian wind energy sector has an installed capacity of 23439 megawatt.

Geothermal energy- energy obtained from heat stored in Earth crust. The GST has identified 350 geothermal energy locations in India. The most promising is Puga in Ladakh. The estimated potential is 10000 megawatt in India. In Himachal places like Manikaran has very good scope.

Biogas energy- it is combustible mixture of Methane and carbon dioxide formed from anaerobic bacteria decomposition of organic compounds.

Wave energy- is generated by the movement of device as a floating on surface of ocean and mode on ocean floor.

Ocean Thermal Energy conversion- is a technology that converts solar radiation to electric power. OTEC has potential installed capacity of 1,80,000 megawatt in India.

India target 175 GW by year 2022 includes 60 gigawatt from wind power 100 from solar power, 10 gigawatt of biomass and 5 gigawatt from small hydro power.

20. Briefly explain Latest development in Science and Technology for harnessing agriculture, horticulture, medical resource in Country.

Answer: Agriculture

- National agricultural market virtual market
- Agriculture Marketing networking network (AGMAKNET) facilities generation and transmission of prices.
- ATM main strength and Research and coordination management.
- Introduction of GM crops i.e. Insect pest resistant.
- Use of GIS.
- Nanotechnology- promoting soil fertility, effective weed control.
- Farm mechanization- new Tools and techniques.
- Swath control- building on GPS technology. Horticulture
- National mission to integrated development of horticulture.
- National Mission on oil seeds and palm oil seeds. seed replacement ratio.
- Micro irrigation technique- efficient method system sprinkler system & drip system.
- Integrated pest management depends upon a range of method to manage pest i.e. bio-control agents.
- Hurdle Technology- to extended shelf life too high Moisture foods without refrigeration.

Medical resources

- Crispr –Cas9- Gene editing a way of making specific changes to the DNA of a cell or organism.
- Anti- Microbial resistance- superbugs which are resistant to all medicines.

21. What hurdles exist in making India a cashless economy? Discuss benefits of becoming a cashless economy and suggest how government can speed up this transformation.

Answer: Hurdles in making cashless economy-

- A large part of population is still outside the banking net and not in a position to reduce its dependence on cash.
- As per 2015 report India unbanked population was at 233 million.
- It will not be easy for the informal sector to become cashless.
- Merchants prefer not to keep records in order to avoid paying taxes.
- People face difficulties in making electronic payments even in metro cities because of poor network.
- The World Bank Global index shows that Indians are significantly less family with digital banking.
- Low literacy rate in rural areas along with lack of internet access. Benefit of becoming cashless economy-
- Tax invaders no more can be hiding & evade from paying tax.
- It will reduce cost of printing notes and making maintaining ATM, branches of Bank. The cost of saving and running cashless economy stated to be around 0.25% of GDP.
- It will reduce black money as majority will be traceable.
- It will ensure targeted delivery of scheme like subsidies and reduce leakages.

What government can do-

- A Sharp increasing the use of mobile phone with internet facility will help.
- Awareness and technological development at National level.
- Protection for online payment to reach local store.

- Opening bank account for unbanked by PMJDY is a major milestone towards cashless economy.
- Adoption of direct benefit transfer.
- Implementation of GST also increased to go cashless.
- Centre provides tailored financial education programs.

Conclusion:

A nationwide financial literacy campaign accompanied by a medium strategy to improve Access need a more investment in digital infrastructure.

22. Demonetization Succeeded in achieving its stated objective critically comment.

Answer: On 8 November, India PM announced ambitious demonetization policy initiative to attach the sources of corruption, black money and fake currency.

Although the motive behind the Policy was noble and well understood but the outcomes was shocking.

RBI report demonetization

- Report brings that 15.28 lakh crore of demonetized currency return to the banking system that is about 99.3% of the total value.
- Only 16, 050 crore not received part of demonetization sum.
- The recent surge in digital transactions, inflows into Mutual Funds increases.
- It cost the government around 8000 crore for printing new notes. Criticism -
- The hope that a large chunk of unaccounted money would not returned to system.
- Logistical difficulty in paralyzing all those who converted unaccounted money into legal tender.
- Negative impacts can be seen and unorganized sectors, farmers and traders.
- The startup world has seen a drop in investment activity.
- Goals achieved instead of stated objective.
- It has badly hit Naxalites. Surrender rate has reached highest.
- Mumbai police report it set back to Hawala transaction.
- Demand of card swipe machine increased.
- The number of IT return filed 2016-17 view by to 25%.

Although well intention behind demonetization move is generally accepted, the time of the move when digital infrastructure is inadequate present and ill preparedness of the government is certainly questionable. The cloud burst in the economy has been seen now days we increase in prices.

23. The debate over commercial production of GM crop seems to have no easy answers. How far is the opposition to GM crops valid? What in your opinion is the way forward with respect to adoption of GM Food crop?

Answer: GM crops are plant used in agriculture, the DNA of which has been modified using genetic engineering techniques. Aim is to introduce a new trait like resistance to certain pest, environmental condition.

**GM is also done to nutritional value. Benefits of GM crops-
Crop**

- Reduced maturation time.
- Increase yield and stress tolerance environment.
- Conservation of soil and water.

- More efficient processing. Animals
- Increase resistance in hard condition.
- Better yield of meat, egg & milk. Society

Increase food security for growing population.

All these factor laid stress on the use of GM crops. India has experienced grand increase in the yield of GM cotton which helps the economy growth to the large extent. GM crop has the potential to end poverty and malnutrition.

Case study- India has been important GM product specifically, GM soya bean oil and GM oil for two decades. No Side Effects have been seen in this crop.

Way forward to GM crops-

Sometime GM seems to be ethically wrong and may have unknown effects but it is the need of hour due to heavy load of population to meet food security and to update economic situation.

- GM should be introduced more in cash crops.
- Proper studies and development should be done before introducing it in food crop.
- The cash crops with GM can economically uplift farmers as well as country.
- Genetic engineering appraisal committee (GEAC) will look into the matter and increase production of cash crops instead of food crops.
- Government need to improve the poor condition of regulation of GM crops

24. PHWR will help India to achieve its Paris Climate change conference commitments. Analyze.

Answer: Paris agreement is an international agreement to combat climate change held in 2015

Aim-

- Keep the Global temperature rise below 2 degrees Celsius above the pre industrial level.
- Pursue efforts to limit temperature increase even further 1.5 degree Celsius.

"It may seem a small child but it is maybe this mean big difference for the earth"

PHWR- pressurized heavy water reactor commonly using uranium as its fuel. Advantages of PHWR-

How PHWR help India to achieve?

India INDC included action in the emission intensity of GDP by 33 to 35000 by 20:30 from 2005 level.

25. Briefly explain the Hydropotential of H.P.

Answer: Himachal have network of rivers majorly Satluj Beas, Chenab, Ravi. Whose is total hydro potential is 23000 megawatt. the total hydro potential of

Satluj is 9412 megawatt while Ravi 2294 megawatt. Chenab with 2728 megawatt and Yamuna 591 megawatt, Beas basin with 4589 megawatt.

Different Power Projects –

- Shannon project - constructed by Punjab government.
- Bhakra - Satluj link project by PB, HR, RJ government.
- Larji project 2003 by HP government executed by State Electricity Board 126 MW.
- Malana project 2007 by RJ spinning and weaving Mill Limited. Lost to Himachal

The hydro project of Himachal i.e. Bhakra & Shanan were named controlled by Punjab govt. with no advantage to Himachal.

1st Phase (1908 to 1917)-

3 project i.e. Bhuri Singh project chamba, Chaba project Shimla, shaman project. 2nd phase (1947-1970) Bhakra Nangal the pride of nation building. Girri & Bassi project were initiated by State Government.

3rd phase (1991-2007) towards higher goal

Hydroplaning starting with the establishment of HPSEB in 1971. Bhaba Hydel project was first major project undertaken by HPSEB. Status of hydro potential-

1. HIMURJA- state, private - small Power Projects. - 5 megawatt.
2. HPSEB larger than 5 megawatt under HPSEB.
3. Himachal is definitely emerged as an important player in hydro power generation. the potential only 6418 megawatt stands utilize and state is also earning good revenue but it can be increased by making reforms.

Attempt all question. Answer to Question No. 26 to 28 should not exceed to 400 words in each case. Content of the answers are more important than their length. Each question carries 20 marks.

26. Critically examine the analysis of Socio-Economic development of Himachal Pradesh?

Answer: Himachal now is one of the fast growing hill states of India in terms of its development in all sectors affecting the socio- economic structure of the State. The economy of the Pradesh is in the phase of huge changes. It has already shed off the elements of backwardness. It has also acquired quite a few characteristics of developed economies. The natural and human resources of the State are the foundations of its economic development. The political history of modern Himachal Pradesh goes back to the period of 1948, when with the merger of 30 Shimla hill states\ Himachal Pradesh was reorganized as a Chief Commissioner's province. The whole territory of the Pradesh before this was divided among Rajas, Ranas and Thakurs. These small princely states had neither the resources nor the will to develop their areas. Land area for production purposes was scarce due to hilly terrain and moreover, the best of it was with the rulers. The common peasants tilled table-cloth size terraced fields carved out of stony hill sides to eke out a precarious living. There was no industry to name, local needs were somehow met partially by local artisans. The people were extremely poor, steeped superstitious and lacking in mobility due to absence of good means of transport and communication, mostly sticking to their ancestral occupations. The scrapping of old feudal order in 1948 and its replacement by a bureaucratic system did not automatically help in the economic growth of the area. The progress rate in the initial years of First Five Year Plan was generally slow and incoherent. In 1951. Democratic government was installed by making Himachal Pradesh a part 'C State. The First Plan was reshaped by popular Minister to put more emphasis on the most desired sector and involved more and more people in the process of economic and social development. The systematic evaluation of resources and their scientific exploitation was started only after the formation of Himachal Pradesh as full-fledged state. It is only there that the people and the government of Himachal started making concerted efforts to improve economic condition of the people and so of state. The economy today is based on agriculture, animal husbandry, industrial development, forests, wild life, hydel power generation, mineral wealth, road and transport, horticulture and tourism. Now the Pradesh scores significantly high on indicators of human development. Its resources of forests, minerals, fruits, herbs and hydel power hold the promise of great progress. Natural assets for tourism in the state are ideal. The state has its own rich culture,

physiographic suited to almost all types of crops and fruits, and an independent administrative identity. Its notable accomplishments have been in literacy, agriculture, horticulture, forests, hydel power generation, roads and tourism. Its vast potential for hydel power generation, because of the advantage of location, has attracted the attention of the entire nation, as a major resource awaiting full exploitation. The state is called 'the apple belt' of India. Its physical diversity, its climate and its peaceful environment can derive high economic values from the development of the tourist industry. Agriculture is the occupation of the people of Himachal Pradesh. It has an important place in the economy of the State. It provides direct employment to 69 percent of the workers of the State. It happens to be the premier source of state income i.e. Gross State Domestic Product (GSDP) as about 20 percent of the total GSDP comes from agriculture and its allied sectors. Out of the total geographical area of 55.67 lakh hectares, the area of operational holding is about 9.79 lakh hectares and is operated by 9.14 lakh farmers as per distribution of land holdings.

27. Briefly explain the Tourism Policy of H.P. their potential and Initiative taken by Govt. to enhance it?

Answer:

INTRODUCTION:

Tourism is one of the fastest growing industries in the world. The number of tourists worldwide has been registering phenomenal growth and it is expected that this number would shortly touch 1.5 billion. Tourism contributes about 11% of work force and 10.2% of global gross domestic product. The dynamic growth of this industry is evident from the fact that a new tourist is added to the sector every 2.5 second. Himachal Pradesh is already a well-established and recognized tourist destination. Promoting tourism in the state in fullest potential turn to be prime engine for economic growth and prosperity of the state. The nature has bestowed Himachal Pradesh with unique beauty and splendor with its lush green valleys, snow covered Himalayan ranges, a peaceful, hospitable and comfortable environment, smiling people and rich cultural heritage which tourist would be hard put to find elsewhere. The out-fringe of Himachal is formed by Shivalik hills which is characterized by shallow valleys and dense forests. The mid ranges have the majestic Himalayan cedar and spruces—followed by alpine meadows that intersperse themselves with snow clad peaks of greater Himalaya. Tourism in Himachal Pradesh received recognition only in 19th century, when the British established the chain of hill stations. Earlier, Himachal had been destination for pilgrims only, but nowadays Himachal attracts number of tourists because of scenic beauty. Tourism contributes nearly 8% of the state's domestic product which is roughly same as that of horticulture sector. For promoting tourism, government should outline the policy and specify the action plan to implement policy with careful planning and infrastructural development, to increase tourism up to 15% by the year 2020 with help of different civil societies and nongovernmental organizations for the promotion and conducting of tourism related activities.

OBJECTIVES:

1. To establish Himachal Pradesh as a leading tourist destination in the country and abroad.
2. To make tourism a prime engine for economic development to the state and as a major means of providing employment.
3. To encourage civil societies and non-government organizations for promoting and conducting tourism related activities.

4. To promote sustainable tourism, which is not only environmentally compatible but which also leads to economic betterment of the rural people.
5. To attract quality tourists and to increase their stay in the state.
6. To position Himachal Pradesh as a top destination for adventure tourism.

TOURISM SUB PLAN:

Tourism is one industry, which is linked with all development departments under their normal programmes and infrastructure that help to promote tourism. The growth of tourism department relates to integrate and coordinate with departments like PWD, Urban development, I & P H, Health, Horticulture, Forest, Power etc. Appropriate coordination is likely to yield good results. Infrastructure in Himachal Pradesh has come up in some of the major destinations like Shimla, Manali, Dalhousie, Mcleodganj and Kasauli. Priority areas include setting up of hill stations, spas and resorts, airports, tourist centers, multiplexes, parking areas, entertainment centres, amusement parks, ropeways, golf courses, 4-5 star hotels etc. The government should invest in human resource development so that man- agerial and technical skill is made available. The state has one Food Craft Institute cum Hotel Management Institute at Kufri. The endeavour is to open more FCIs in Kangra and in Kullu.

NEW MARKETING STRATEGY:

In order to bring the state on international tourist map government under takes various step slik

1. Creation of Destination Himachal Fund i.e. a joint effort of the tourism development board, th emajor temple trusts and private sector.
2. Printing of posters and other tourist literature.
3. Developing 10 min, 20 min tourism film in order to telecast in the electronic channels and also display during tourist fairs/marts.
4. Upgradation of information centers.
5. Conducting of buyer and seller meets.
6. Professional guides to be trained and encouraged.

EFFECTIVE REGULATION:

The state government has passed Himachal Pradesh Registration Touris trade Act 2002. It calls for inspection and checking of hotels, travel a gencies against over charging, substandard services etc. The tourists police in the state is trained for regulating tourism related activities. The state government takes steps to ensure proper hygienic conditions and to prevent the exploitation of tourists. It has mad edifferent type of committees consisting of experts, representatives of the tourist trade and government officers which help to promote the tourism in the state.

SCOPE OF TOURISM IN HIMACHAL PRADESH:

Tourism is itself a broader term. The fruits of tourism must percolate down to rural areas in order that it is truly sustainable and responsible. For promoting rural tourism, villages must be near to existing touristcentres. Not, even rural tourism, state also offers newera of nature enjoyment and learning and also provides visitors an eccellente xposure to the temperate forests. This makes it an ideal area for developing ecotourism activities like jungle safaris, trekking, rock climbing, camping etc. Various ecotourism societies have been established on CBET (Community Based Eco Tourism) basis to cover the great Himalayan National Park (Kullu), Himalayan National Park (Shimla), Renuka Wildlife Sanctuary (Sirmour) and Potter's Hill Van Vihar (Shimla). The State has varied topography, climate and forest cover and is endowed with a vastvariety offlora and fauna. At present the reare 32 Sanctuaries, 2 National

Parks and 3 Game Reserves. Himachal has emerged as an important pilgrim destination. Large number of religious tourists visits sacred shrines of state through out the year. The tourism department proposes to promote and setup adventure sports school in order to train you thin Paragliding, Rafting, Watersports, Mountaineering, Motor sports etc in coordination with the WHMI Manali and the State Level Associations. Even there is also a great scope to setup Spa's, health resorts to promote health tourism. Potential of Panchkar maen couragesus to start this in a big way in the state in or derto attract larger number of tourists for Panchkarma treatment. Training the youth in Panchkarma (Ayurvedic College Paprola) will be undertaken through the department of Ayurveda who will then be employed in spa's and health resorts. Promotion of localart and the culture and generation of income employment through it are major components of our tourism policy.

28. Give an account of the growth and development of nuclear science and technology in India. What is the advantage of fast breeder reactor programme in India? (250 words)

Answer: India's nuclear programme was formulated in 1950s by Dr Homi Bhabha to secure the country's long term energy independence, via use of uranium and thorium reserves found in the monazite sands of coastal regions of South India.

The Ultimate focus is on Thorium Fuel Cycle. For this purpose the three stage nuclear programme was envisaged.

Three stages consist of

- Pressurized Heavy Water Reactor (PHWR)
- Fast Breeder Reactor (FBR)
- Advanced Heavy Water Reactor (AHWR)

The first stage involved using natural uranium to fuel PHWR to produce electricity and producing Plutonium -239 as a byproduct. We not here that the PHWRs were chosen for the first stage because in 1960s, India had the efficient reactor design in terms of uranium utilization. It was calculated that rather than going for creation to Uranium Enrichment Facilities, it would be wiser to create heavy water production facilities. Furthermore the byproduct plutonium- 293 would be used in the second stage.

Use of Nuclear Power in India Nuclear power is the fourth – largest source of electricity in India after thermal, hydroelectric and renewable sources of electricity. As of 2016, India has 22 nuclear reactors in operation in 8 nuclear power plants; having a total installed capacity of 6,780 MW Nuclear power produced a total of 35,000 GWh of electricity in 2016. 6 more reactors are under construction with a combined generation capacity of 4,300 MW. Other than these nuclear power is also used in the fields of medicine and food technology as well. In the recent times India has also envisaged to work in the field of neutrino research by building Indian Neutrino Observatory in Tamil Nadu.

Advantage of Fast Breeder Reactor (FBR) for India

The second stage involves using plutonium- 239 to produce mixed- oxide fuel, which would be used in Fast Breeder Reactor. Plutonium 239 undergoes fission to produce energy, and metal mixed- oxide fuel to produce more plutonium-239.

Furthermore once sufficient amount of plutonium- 239 is built up, thorium will be used in the reactor, to produce uranium -233. This uranium is crucial for the third stage.

This stage is very important for India's nuclear programme as thorium in itself is not fissile in to U-233. This plutonium is being built by the FBRs.

HPAS MAINS MANUAL

1. Freedom Struggle: Differences between Moderates and Extremists Ideology (8/20 marks)

Moderates:

- [1] Social base zamindars and upper middle classes in towns.
- [2] Ideological inspiration western liberal thought and European history.
- [3] Believed in England's providential mission in India.
- [4] Believed political connections with Britain to be in India's social, political and cultural interests.
- [5] Professed loyalty to the British Crown.
- [6] Believed that the movement should be limited to middle class intelligentsia; masses not yet ready for participation in political work.
- [7] Demanded constitutional reforms and share for Indians in services.
- [8] Insisted on the use of constitutional methods only.
- [9] They were patriots and did not play the role of a comprador class.

Extremists:

- [1] Social base educated middle and lower middle classes in towns.
- [2] Ideological inspiration Indian history, cultural heritage and Hindu traditional symbols.
- [3] Rejected 'providential mission theory' as an illusion.
- [4] Believed that political connections with Britain would perpetuate British exploitation of India.
- [5] Believed that the British Crown was unworthy of claiming Indian loyalty.
- [6] Had immense faith in the capacity of masses to participate and to make sacrifices.
- [7] Demanded swaraj as the panacea for Indian ills.
- [8] Did not hesitate to use extra- constitutional methods like boycott and passive resistance to achieve their objectives.
- [9] They were patriots who made sacrifices for the sake of the country.

Even the propaganda by the Moderates did not reach the masses. No all-India campaigns of the scale of Swadeshi and Boycott Movement had been organised earlier by the Moderates and, in this campaign, they discovered that they were not its leaders, which was rather natural.

The Extremist ideology and its functioning also lacked consistency. Its advocates ranged from open members and secret sympathisers to those opposed to any kind of political violence. Its leaders Aurobindo, Tilak, B.C. Pal and Lala Lajpat Rai—had different perceptions of their goal. For Tilak, swaraj meant some sort of self-government, while for Aurobindo it meant complete independence from foreign rule.

2. Freedom Struggle: Role of Eminent Personalities (4/8 marks)

Dr Bhimrao Ramji Ambedkar 1891-1956

- Leader of the depressed class and an eminent jurist.
- He founded the Depressed Classes Institute (1924) and Samaj Samata Sangh (1927).
- He set up a network colleges in the name of Peoples Education Society.
- Participated in all the Three Round Table Conferences and signed the Poona Pact with Gandhiji in 1932.
- He was in the Governor General's Executive Council from 1942 to 1946 and organized the Indian Labour Party and Scheduled Caste Federation.
- Chairman of the Drafting Committee of Indian Constitution.
- As the first Law Minister of the Independent India, he introduced the Hindu Code Bill.
- He started 'The Republican Party' in 1956.

- Towards the end of his life, he embraced Buddhism.

Vallabhbhai Patel 1875-1950

- A freedom fighter and social reformer from Gujarat, he is popularly known as Sardar Patel and honoured with the title of "The Iron Man of India".
- He started the Kheda or Kaira Satyagrah in 1918 and fought for the rights of the peasants in Bardoli Satyagrah. Here, he was honoured with the title "Sardar".
- He was the first national leader to be arrested during the Civil Disobedience Movement.
- He participated in Gandhi's Individual Satyagrah and Quit India Movement.
- In post independence period, he was appointed as the first Deputy Prime Minister of India along with the portfolios of the Information and Broadcasting and Home Ministry.
- He played a major role in integrating the 562 states in the Indian Union.

Subhash Chandra Bose 1897-1945

- He passed the Indian Civil Services Examination in 1920 in England but left it on Gandhiji's call of NCM.
- Founded the Independence for India League with J.L. Nehru.
- Elected as the President of INC at its Haripura Session (1938) and Tripuri Session (1939) but resigned from Tripuri due to differences with Gandhiji.
- He founded the Forward Block (1939) and Kisan Sabha.
- He escaped to Berlin in 1941 and met Hitler. He took the charge of Indian Army (Azad Hind Fauz) in 1943 in Singapore and set up Indian Provisional Government there.
- He addressed Mahatma Gandhi as the "Father of the Nation."
- He supposedly died in a plane crash in 1945.
- Slogans — "Dilli Chalo" and "Jai Hind".
- Autobiography — 'The Indian Struggle'.

3. Concept of Nationalism (4/8marks)

'Nationalism' is the patriotic feeling or love towards our nation or country. It indicates respect, freedom and development. Nationalism is a spiritual concept which originates in the people having same race, language, traditions and culture, religion, politics, inhabiting a territory of a geographic unity. Flags, national anthem, songs, etc represent the nationalism. In short, it is associated with the feeling of being a part of a nation and dedicated toward the growth of our own nation.

Origin of Nationalism: From a political or sociological perspective, there are two main perspectives on the origins and basis of nationalism;

- [1] The primordial perspective describes nationalism as a reflection of the ancient and perceived evolutionary tendency of humans to organize into distinct groupings based on an affinity of birth.
- [2] The modernist perspective describes nationalism as a modern phenomenon that requires the systemic conditions of modern society to exist.

Merits

- Nationalism preserves national culture.
- It inspires people to succeed.
- It gives a nation a position of strength.
- It creates love for country.
- It develops the infrastructure of the nation.
- Nationalism creates a healthy spirit of national rivalry.
- Nationalism breeds legitimate pride and self-respect in a country.

- Nationalism offers dynamic forces cultural and economic creativity.
- Nationalism helps in promoting internationalism.

Demerits

- It often leads to separation and loneliness.
- It can lead to socioeconomic cliques.
- It can lead to war.
- According to Hayes, nationalism has been "a curse and nothing but a curse."

4. Concept of Socialism (4/8 marks)

'Socialism' means the society whose large heavy industries are controlled by a government, not by an individual or any person.

The state is responsible for organizing the economy and society so that there are no capitalists, and the workers run the place. Eventually, this organisation will become less and less as Communism begins.

Merits

- Economic Equality
- Lower unemployment
- More public goods and services
- Meets the needs of majority people

Demerits

- Redistribution of incomes
- High taxes
- Less freedom
- Lack of incentives
- Lack of motivation
- Government sets prices for government-owned resources
- Government decides the allocation of government-owned resources

5. Himachal Pradesh: Temple Architecture (8/20 marks)

Throughout Himachal Pradesh, there are distinct styles of hill temple architecture which mark out different eras of religious beliefs. Taking the style of the roof as the basis of distinction, the types are:

- [1] **Shikhar Style** : A tower like conical formation built of stone and decorated with carvings is Shikhar style of architecture. The top of the shikhar has amalaka, the circular sun-disc. All the essential elements of a Hindu temple; mandap (porch), garbh griha (sanctum sanctorum) and shikhar(tower); are there in such constructions. Shikhara a Sanskrit word translating literally to "mountain peak", refers to the rising tower in the Hindu temple architecture of North India, and also often used in Jain temples. The Luxmi Narayan Group of temples at Chamba are fine examples of this style
- [2] **Pent Roof Style** : Temples with wooden style are found in Himachal from the ancient time. It is the most common form in the hills. Freestanding pagoda style having superimposed roofs directly over the garbh griha . Bijli Mahadev (Kullu), Lakshana Devi at Bharmour (Chamba), Hatkoti (Shimla) are a few examples of this type of architecture. It is the most common form in the hills.
- [3] **Pagora Style** : A pagoda is a tiered tower with multiple eaves, built in traditions originating as stupa in historic South Asia and further developed in East Asia or with respect to those traditions, common to Nepal, China, Japan, Korea, Vietnam, Myanmar, India, Sri Lanka and other parts of Asia. Pagoda style of temple architecture in H.P. is inherited Nepal The temples with pyramidal tiered roofs shape up the pagoda look. The diminishing roofs rise above the other and the top one, unlike the squarish

others is round - funnel like. Hadimba (Manali) and Prashar temple (Mandi) are a few examples of this type of architecture.

- [4] **Dome Style** : A dome is an architectural element that resembles the hollow upper half of a sphere. Domes have a long architectural lineage that extends back into prehistory and they have been constructed from mud, snow, stone, wood, brick, concrete, metal, glass, and plastic over the centuries. The symbolism associated with domes includes mortuary, celestial, and governmental traditions that have likewise developed over time. These are new additions to the old architecture of temples in the hills. The temples with domes round or elongated or flat. Jwalamukhi (Kangra); Chintpurni (Una), Naina Devi (Bilaspur) are a few examples of this type of architecture.
- [5] **Flat roofed Style**: Most of the buddhist monasteries are flat roofed. A flat roof is a roof which is almost level in contrast to the many types of sloped roofs. The slope of a roof is properly known as its pitch and flat roofs have up to approximately 10°. Flat roofs are an ancient form mostly used in arid climates and allow the roof space to be used as a living space or a living roof. Narbadeshwar at Sujampur Tira (Hamirpur) is among a few examples of this type of architecture.
- [6] **Sutlej Valley Style**: It is a style of mandap with one or more pagoda roofs above the garbh griha that correspond to shikhar of a classical temple, usually at one end of the building but sometimes in the centre. A blend of pent roof and pagoda style. It is a style of mandap with one or more pagoda roofs above the garbh griha that correspond to shikhar of a classical temple, usually at one end of the building but sometimes in the centre. A fusion of pent roof and pagoda style is generally found in the upper Satluj valley. Bhimakali temple at Sarahan (Shimla) is finest example of this style.
- [7] **Monasteries**: Since long, Himachal Pradesh has been under the influence of Buddhism. Prominent amongst these monasteries are the Tabo, Kye, Namgyal, Rewalsar, Dhankar, Guru Ghantal, Shashur, Kardang, Tayul, Thang Yug, Kungri, Nako, Tashiganj and Lippa. These monasteries of Himachal are held in respect by not only Buddhist community, but also by people of other religion. Moreover, quite a few of these monasteries are recognised on international basis.

6. Disaster Management models (8 marks)

A disaster can be defined as an occurrence causing widespread destruction and distress. Disaster management does not avert or eliminate the threats; instead, it focuses on creating plans to decrease the effect of disasters. Failure to create a plan could lead to damage to assets, human mortality, and lost revenue.

Disaster = Hazard + Vulnerability – Capacity

Disaster management is a collective term encompassing all aspects of planning for and responding to emergencies and disasters, including both pre- and post-event activities. It refers to the management of both the risk and the consequences of an event.

Phases of Disaster : The four phases of disaster: 1) mitigation; 2) preparedness; 3) response; and 4) recovery. The model helps frame issues related to disaster preparedness as well as economic and business recovery after a disaster. Each phase has particular needs, requires distinct tools, strategies, and resources and faces different challenges. The issues addressed below relate to the resiliency and recovery of the local economy and business community before and after a major disaster.

- [1] **Mitigation**: It involves steps to reduce vulnerability to disaster impacts such as injuries and loss of life and property. This might involve changes in local building codes to fortify buildings; revised zoning and land use management; strengthening of public infrastructure; and other efforts to make the community more resilient to a catastrophic event.

- [2] **Preparedness** : This focuses on understanding how a disaster might impact the community and how education, outreach and training can build capacity to respond to and recover from a disaster. This may include engaging the business community, pre-disaster strategic planning, and other logistical readiness activities. The disaster preparedness activities guide provides more information on how to better prepare an organization and the business community for a disaster.
- [3] **Response**: It addresses immediate threats presented by the disaster, including saving lives, meeting humanitarian needs (food, shelter, clothing, public health and safety), cleanup, damage assessment, and the start of resource distribution. As the response period progresses, focus shifts from dealing with immediate emergency issues to conducting repairs, restoring utilities, establishing operations for public services (including permitting), and finishing the cleanup process.
- [4] **Recovery**: It is the fourth phase of disaster and is the restoration of all aspects of the disaster's impact on a community and the return of the local economy to some sense of normalcy. By this time, the impacted region has achieved a degree of physical, environmental, economic and social stability.

In essence, disaster management is more than just response and relief; it is a systematic process aimed at reducing the negative impact and/or consequences of adverse events.

7. Interrelationship of disaster and development (4/8 marks)

Disasters and development are closely linked. Disasters can both destroy development initiatives and create development opportunities. Development schemes can both increase and decrease vulnerability. In the traditional approach to disasters, the attitude was that the disasters, especially natural ones, were an act of god and as such were beyond human control; accepting death and damage to property was part of the costs. With such an attitude, most development plans were designed without consideration for the effect disasters would have on community plans and vice versa. When a disaster did occur, the response was directed at meeting emergency needs and cleaning up.

In the current approach, it has been realized that much more can and need to be done to reduce the severity of hazards and disasters. A growing body of knowledge on the relationships between disasters and development indicates four basic themes as follows:

- [1] Disasters set back development programming, destroying years of development initiatives.
- [2] Rebuilding after a disaster provides significant opportunities to initiate development programmes.
- [3] Development programmes can increase an area's susceptibility to disasters.
- [4] Development programmes can be designed to decrease the susceptibility to disasters and their negative consequences.

Thus, the policy makers cannot ignore the relationship between the disaster and development. Projects are thus being designed to include disaster recovery programmes and with long term development needs in mind. Disasters can significantly impede the effectiveness of development resource allocation.

8. Difference between Himalayan and Peninsular Rivers (8 marks)

Rivers are described as the large natural water body, which flows towards the sea or another river. In India, the rivers are broadly classified as Himalayan Rivers and Peninsular Rivers. Himalayan rivers are the watercourses that arise from Himalayan ranges and are perennial in nature. On the contrary, Peninsular rivers are the ones that originate from the Western Ghats and are non-perennial.

Definitions

Himalayan Rivers are described as the rivers that arise from Himalayan mountain ranges, which receive water from both rain and melted snow from glaciers. The Indus, the Ganga and the Brahmaputra are the three

important Himalayan Rivers. These help in irrigation and cultivation of dry areas and farms, throughout the year.

Peninsular Rivers are the seasonal rivers as their flow primarily relies on the rainfall. These rivers experience a reduction in the flow of water, even if they are long, during the dry season. They are characterised with short and shallow courses.

Key Differences

The points given below clarifies the difference between Himalayan and Peninsular rivers:

- [1] Himalayan Rivers are the water bodies that emanate from the north of Himalayan mountain ranges. On the other extreme, Peninsular Rivers include those watercourses that arise from, Western Ghats or Central Highlands.
- [2] The Himalayan rivers are perennial, i.e. they have water all around the year. As against, Peninsular rivers are seasonal, in the sense that they have water during a particular period only.
- [3] Big deltas are formed by Himalayan Rivers. On the other extreme, some peninsular rivers like the Mahanadi, the Godavari, the Krishna and the Cauveri form deltas, while the Narmada and the Tapi form estuaries.
- [4] While Himalayan rivers form meanders, there is an absence of meanders in case of Peninsular rivers.
- [5] The bedrocks of Himalayan rivers are soft, sedimentary and easily erodible. Conversely, bedrocks of Peninsular rivers are hard, resistant and not easily erodible.
- [6] Himalayan rivers get water from snow and rain, whereas Peninsular rivers are fed by rain only.
- [7] The drainage basin of Himalayan rivers is comparatively larger than the Peninsular rivers.
- [8] Himalayan rivers water helps in the irrigation of Northern Plains. In contrast, Peninsular rivers irrigate Deccan Plateau.
- [9] Himalayan rivers form a V-shaped valley, while Peninsular watercourses form valley having a U-shape

9. Human Settlements in India (8 marks)

A human settlement is an organized grouping of human habitation or A cluster of dwellings of any type and size where human beings live is known as human settlement.

Two major types of settlements: urban and rural. Urban settlements have a lot of people. These include large cities and towns. Rural settlements, on the other hand, are more spaced out. A settlement in which most of the people are engaged in agriculture, forestry, mining and fishery is known as rural settlement.

Types of Rural Settlements

- [1] **Clustered settlement:** The settlement in which the houses are closely built up and compact is known as clustered settlement. The shape of clustered settlement normally varies from rectangular, radial, to linear. Clustered settlement in India normally found in fertile alluvial plains and in the northeastern states.
- [2] **Semi-clustered or fragmented settlement:** The settlement, clustering in a restricted area of dispersed settlement normally looks like semi-clustered. Examples of such settlement can be seen in Gujarat plain and some parts of Rajasthan.
- [3] **Hamleted settlement:** Some settlement is fragmented into several units and physically separated from each other is known as hamleted settlement. Examples of hamleted settlement can be seen in the middle and lower Ganga plain, Chhattisgarh and lower valleys of the Himalayas.
- [4] **Dispersed or isolated settlement:** The isolated settlement is known as dispersed settlement. Examples of such settlement can be seen in parts of Meghalaya, Uttaranchal, Himachal Pradesh and Kerala have this type of settlement.

Types of Urban Settlement

Like rural settlement, urban settlements have also been developed during the ancient period itself. Based on Time, Location, and Function, Urban Settlement is categorized as –

- [1] **Ancient City:** Varanasi, Prayag (Allahabad), Pataliputra (Patna), Madurai, etc. are the examples of ancient city.
- [2] **Medieval City:** Delhi, Hyderabad, Jaipur, Lucknow, Agra, Nagpur, etc. are the examples of medieval city.
- [3] **Modern City:** Surat, Daman, Panaji, Pondicherry, etc. are the examples of modern city.
- [4] **Administrative City/Town:** The town or cities performing administrative works are categorized as administrative towns/cities. For example, the national capital (New Delhi) and the capital of all states and Union Territories are the administrative towns/cities.
- [5] **Industrial City:** The towns/cities that developed because of the industrial development are known as industrial towns/cities. For example, Mumbai, Salem, Coimbatore, Modinagar, Jamshedpur, Hugli, Bhilai, etc.
- [6] **Religious City:** Some towns mark their development with the existence of religious shrines. Such towns are known as religious towns. For example, Varanasi, Mathura, Amritsar, Madurai, Puri, Ajmer, Pushkar, Tirupati, Kurukshetra, Haridwar, Ujjain, etc.
- [7] **Tourists' City:** The towns that developed because of the influx of tourists are known as tourists' towns. For example, Nainital, Mussoorie, Shimla, Pachmarhi, Jodhpur, Jaisalmer, Udagamandalam (Ooty), Mount Abu, etc.
- [8] Likewise...

10. Agro-climatic zones in Himachal Pradesh (8 marks)

Agro-climatically, the State has been divided into four zones keeping in view the altitude, rainfall, temperature, humidity and topography.

The salient features of different zones have been briefly described below:

- [1] **Sub-Montane and Low Hills Subtropical Zone :** The soils of this zone are productive, if fertilized. The texture of the soil varies from loamy to sandy loam. The average rainfall is 1100 mm of which 80 per cent is received during July to September. The farming is rain fed as only 16.6% of the total area is under irrigation.
- [2] **Mid-hills Sub-humid Zone :** The texture of the soils in Zone II is loam to clay loam. iii. These are deficient in nitrogen and phosphorus and have poor water and nutrient holding capacity. The area from Dharamshala to Jogindernagar in the foothills of Dhauladhar ranges receives rainfall as high as 3,000 mm most of which comes between mid June to mid September. In the remaining areas, it is around 1,500 mm. While maize, rice, wheat, potato, pulses and oilseeds are major field crops, stone and citrus fruits are important fruit crops. The area under irrigation is only 17.5% and kuhls (gravitational flow channels) are the important source of irrigation.
- [3] **Mid-hills Temperate Dry Zone:** The soils of this zone are shallow in depth, acidic in reaction and silt loam to loam in texture. These are deficient in nitrogen and phosphorus. The average rainfall is 1,000 mm most of which is received during the monsoon season. The zone is suitable for growing horticultural crops, particularly apple, plum and apricot. Cultivation of offseason vegetable crops like peas, cabbage, cauliflower and tomato has gained ground in some areas
- [4] **High Hills Temperate Dry Zone :** The soils of this zone are mainly sandy loam, neutral to alkaline in reaction and have low fertility. This zone has the highest percent of irrigated area (40.6%). The important crops include potato, barley, buck wheat, peas and minor millets. The area is particularly

suitable for growing off-season vegetables and seed production. In general, only one crop can be grown during the whole of the agricultural year because of heavy snowfall in winter from November to April.

11. Salient features of Indian Society : Unity in Diversity. (20 marks)

The most often noticed feature of Indian society is "Unity in Diversity". This phrase celebrates how India has been stronger by welcoming various cultural, social and ethnic elements. It also transcends the notion accommodation without assimilation has been the key feature of Indian civilization. India has accommodated different elements of society without letting them lose their separate identity.

We can divide the different elements of unity in diversity in Geographical elements, religious elements, cultural elements, political elements and linguistic elements. A brief idea about each of them is as follows:

- [1] **Geographical Elements:** India has diverse geography. At broadest level, the country can be divided into several regions viz. Himalaya, northern plains, plateau of central India and Deccan, Western & Eastern Ghats, Thar Desert etc. Each of them has different climate, temperature, vegetation, fauna, people and so on. Despite of this diversity, India has been defined as a distinct geographical unit since ages. A sloka in Vishnu Purana defines Bharata as the land which is south of snowy mountains and north of ocean.
- [2] **Religious Elements:** India has multitude of religions including majority Hinduism and minority Islam, Sikhism, Christianity, Buddhism, Jainism, Zoroastrianism, Judaism and so on. The religious diversity has been one of the main divisive force in the country leading to problem of communalism, yet this diversity has many a times kept the country united in difficult times. Religious unity is particularly visible when a war or a disaster happens. Time and again, India has stood united in crisis, and that is what religious unity in diversity of India is.
- [3] **Political Elements:** Though it is believed that India's continuity as a civilization was social and cultural rather than political; yet idea of bringing entire country under one central authority has been dream of great kings, sultans, emperors and rulers. This idea was put into practice by Chandragupta; Asoka; Harsha; Akbar and British rulers. Despite this, India was never a well organized political unit. Even during British India, there were 600 princely states which were internally autonomous. Then, our current form of democracy and government draws its existence from different political parties, political ideologies and so on.
- [4] **Linguistic Elements:** While three fourth of India speaks Indo-Aryan Languages, Dravidian languages are spoken by one. fourth of Indians. India has 122 major languages and 1599 dialects, thus making it one of the most linguistically diverse nations around the world. English emerged as lingua franca of the country and serves as medium of communication between two people who have different mother tongue. Similarly, Hindi has also, to a great extent, served to keep the country united.
- [5] **Accommodation within Hinduism** as element of unity in diversity Hinduism is not a homogenous religion with one God, It is a federation of faiths with multiple deities, multiple Holy Scriptures and multiple of faiths and philosophies including atheism. Its elastic character of Hinduism that has accommodated and adjusted with various faiths, religions etc. and has allowed coexistence of several faiths in India.

Sir Herbert Risely has rightly observed: "Beneath the manifold diversity of physical and social types, languages, customs and religions which strike the observer in India, there can still be discerned a certain underlying uniformity of life from the Himalayas to Cape Comorin."

12. Kinship and types of kinship (4/8 marks)

Kinship is the relation by the bond of blood, marriage and includes kindred ones. It represents one of the basic social institutions. Kinship is universal and in most societies plays a significant role in the socialization of individuals and the maintenance of group solidarity.

Affinal and Consanguineous kinship

Relation by the bond of blood is called consanguineous kinship such as parents and their children and between children of same parents. Thus son, daughter, brother, sister, paternal uncle etc are consanguineous kin. Each of these is related through blood. Kinship due to marriage is affinal kinship. New relations are created when marriage takes place. Not only man establishes relationship with the girl and the members of her but also family members of both the man and the woman get bound among themselves.

Type of Kinships

- [1] Primary kins: Every individual who belong to a nuclear family finds his primary kins within the family. There are 8 primary kins- husband-wife, father-son, mother-son, father-daughter, mother-daughter, younger brother-elder brother, younger sister-elder sister and brother-sister.
- [2] Secondary kins: Outside the nuclear family the individual can have 33 types of secondary relatives. For example mother's brother, brother's wife, sister's husband, father's brother.
- [3] Tertiary kins: Tertiary kins refer to the secondary kins of our primary kins. For example wife's brother's son, sister's husband's brother and so on. There are 151 types of tertiary kins.

13. CORE VALUES OF PUBLIC ADMINISTRATION (4/8 marks)

Core values is a broad phrase to describe the standards by which we characterize a person, profession, or organization. In order to achieve success at a personal and organizational level in the public sector, these values must be practiced on a daily basis.

- [1] **Transparency:** to ensure citizens the availability of information which is deemed public. If the goal of an organization is to serve the citizens to the best of their ability, then avoiding or failing to achieve transparency would cause significant damage to the relationship between them and the people they are aiming to serve.
- [2] **Accountability:** to adhere to a standard of professionalism in the workplace. Accountability is an important aspect of the functionality of any organization public or private. Essentially, it reminds individuals that while they are employed by a professional organization they will be held liable for their actions.
- [3] **Code of Ethics:** Each public administrator is asked to adhere to a code of ethics. In order to function properly as an organization, the administrator must be held to a high degree of ethical standards. Specifically, ethics calls for administrators to display integrity, and be mindful of laws and regulations.
- [4] **Professionalism:** It is an important core value when considering the prestigious nature of our positions in the field of public administration. To be professional is to understand the importance of our jobs in the public sector, to have respect for ourselves and the organizations that we represent, and to act accordingly. Each individual is to deal with issues, whether positive or negative, in a mild and straightforward manner whenever possible. Without professionalism in public administration, the overall perception of our work and our organizations would undoubtedly falter.
- [5] **Leadership:** Practicing leadership is setting an example of professionalism for staff members and possessing the motivation to achieve organizational goals. In doing so, leaders must have the ability to recognize the talents of individuals and allow those talents to be utilized for the betterment of the organization.

14. Gandhian philosophy of Satyagraha (20 marks)

The Gandhian philosophy of satyagraha is a natural outcome of the supreme concept of truth. If truth is the ultimate reality, then it is imperative to safeguard the criteria and foundations of truth. This concept also aims at furtherance of love and self-purification. Satyagraha can be regarded as a vindication of truth by taking self-suffering in the form of love. It is the weapon of the bravest and the strongest. It is an antidote for coercion. It was believed that Satyagraha enables elevation of spiritual and moral qualities of an individual.

Gandhi's Concept of Satyagraha is an exceptional and novel way to resist evil. The main function of a Satyagraha is not to injure the enemy by any means. It is an appeal to the enemy either through reason or by a gentle rational argument. It is something like a sacrifice of the self. Satyagraha has two positive features, viz., it showers blessings on those who practice it and secondly, it blesses those individuals against whom Satyagraha is practiced.

This ideal also expounded that there is a direct relationship between the purity of the suffering and the extent of progress. It believes that the purer the suffering, the greater the material and spiritual progress. The theory of Satyagraha has three main purposes firstly, it purifies the sufferer; secondly, it intensifies favorable public opinion; and thirdly, makes a direct appeal to the soul of the oppressor.

Gandhi differentiated between the terms Satyagraha and Passive resistance. The former, according to him, is a moral weapon and the latter is a political weapon. The victory of the soul power over the physical force is reflected in the idea of Satyagraha. The former is dynamic, while the latter is static.

The ultimate aim of Satyagraha is to achieve success, despite his extreme sufferings, with cheerfulness and love unlike passive resistance that is undertaken in a situation of weakness and despair. Ultimately, Satyagraha offers a substantial and effective opposition to injustice and tyranny in comparison to passive resistance.

Techniques of Satyagraha:

Some of the major techniques of Satyagraha are non-cooperation, civil disobedience, Hijrat, fasting and strike.

- [1] Non-cooperation: Gandhi was of the opinion that injustice prevails in the society only when both, the government perpetuates and the people extend their cooperation. Once this cooperation is withdrawn, then the entire system paralyses. It is widely accepted that even the most despotic leader cannot continue for long if he lacks the consent of his subjects.
- [2] Civil Disobedience: According to Gandhi, civil disobedience is an effective and bloodless substitute for the armed revolt. This is another method of violating the established order of the state in a non-violent and peaceful fashion. However, necessary care has to be taken to make the entire act more sincere, respectful and principled. Those who practice civil disobedience, according to Gandhi, must ensure that the violence and general lawlessness would not break out as it could disturb the peaceful environment in society.
- [3] Hijrat: Etymologically, the term implies voluntary exile from one's permanent place of habitation. One of the main reasons for the people to resort to Hijrat is when they feel oppressed either due to loss of self-respect or honourable living; they attempt to migrate permanently to other places. In simple terms, it is a protest against the oppressor. Gandhi suggested this measure to the Harijans mainly due to their oppression, especially by the dominant classes in some places.
- [4] Fasting: This was another strong weapon suggested by Gandhi in his non-violent struggle for freedom. However, he was clear that this act of fasting must not be used as and when, and at every occasion. He stated that unwarranted use of the device would lose its importance, and for this reason he suggested that it must be sparingly used. Gandhi was of the opinion that those who are spiritually fit and have purity of mind and thought, humility, discipline and faith should alone undertake fasting.

- [5] Strike: The last device a Satyagraha uses is the strike demanding justice for legitimate cause as well as the redressal of grievances. Strike is considered a voluntary suffering undertaken for the transformation of the erring opponent. Gandhi was not in favor of Marxist principle of class war and forceful takeover of the means of production from the bourgeoisie. He was of the opinion that a firm or an industry is like a trust either under the capitalists and the labour. A strike is meant to end injustice, inefficiency, corruption and short-sightedness of the capitalists. However, in strikes adequate care has to be taken to ensure that it remains non-violent as well as peaceful and makes their demands meaningful, just and feasible.

Therefore, it can be stated that Satyagraha is a weapon for justifying individual rights as against the oppressive, coercive attitude of the Britishers. Gandhi initially used this weapon in South Africa and owing to its success there, he applied the same in India during the freedom struggle. His firm belief in two mighty weapons, namely, Satya and Ahimsa, made it clear to the entire world that the path of righteousness and justice would one day make anybody or any nation powerful on the earth.

15. Ancient tribes of Himachal Pradesh. (8 marks)

- [1] Dasas (Dasyu) – Inhabitant of Shivalik Hills during the Pre-Vedic period. Chamuri, Dhuni, Pipru and Sushna were powerful chiefs of Dasas. Dasas were accepted into the Aryan fold due to the constant efforts of Rishi Vishwamitra and Rishi Bhardwaj.
- [2] Khasas – Inhabitant of Shimla, Sirmaur, parts of Kullu and Kinnaur District of Himachal Pradesh and Tehri, Kumaon and Garhwal area of Uttarakhand. In 'Brihat Samhita' of Varahamihira. The Khasas were mentioned with Kuluta, Tanganas, and Kashniras. In Kinnaur, they call themselves Khashiya and associate themselves with Rajputs. Khasas at present represent both the Brahmin and Kshatriya part of the population.
- [3] Kinners – Kinner originated from the two Sanskrit words; Kim + Nara, means what kind of person are they? The look of the Kinner is that of a 'half man and half horse' means the people with 'Ashwamukha'. They are believed to have inhabited the inner Himalayan terrain right from the River Ganges up to the River Chandra Bhaga till Gupta Period. According to Bhagwata Purana, Kinner traces their origin from the shadow of Lord Brahma.
- [4] Kiratas – In the history of Kashmir, 'Chandalas' and 'Kaivaratas' have been mentioned as the low caste people. Later on, Kiratas came to be known as 'Mavies' or 'Mavanas' in the region across the River Satluj and Yamuna. The Kirata's King 'Sambhar' fought against the Aryan King 'Divodasa' and the war lasted for forty years, discussed in the Rig Veda by Rishi Vashista and Vamdeva.
- [5] Nagas – They were the worshiper of Nagas (Serpents) and believed to have inhabited the Himalayan region. Their famous Kings were Vasuki, Kali, and Takshaka.
- [6] Pishachas – This tribe is known as 'Rakshasas' in Vedic times. They were the consumer of raw flesh and believed to have inhabited North Frontier and the adjoining Himalayan tract.
- [7] Yakshas – In Mahabharata, there is a reference to the encounter between Yudhishtira and his brothers with a Yaksha. They were known as the tree gods, endowed with mysterious superhuman powers

HPSAS (MAIN) – 2019

GENERAL STUDIES

MODEL TEST PAPER-1

(Compulsory)

SCHEDULED DATE BY HPPSC-24-06-2019 (2:00-5:00 PM)

Time: 3 Hours

Maximum Marks: 200

Note: - All questions are compulsory.

SECTION-A

(2 marks each; maximum 15 words)

Answer the following questions serially in your answer-book:

1. How many women MLAs are in 13th Legislative Assembly of Himachal Pradesh? Also mention their constituencies.
2. Give the population density of Himachal Pradesh of census of 2011. Also mention the Districts with Highest and lowest population density respectively.
3. What is Abel Prize and how much monetary award is provided to the winner?
4. What are the criterias measured under Human Capital Index which is published by World Bank as part of the World Development Report 2019.
5. "Atal Nirmal Jal Yojna" in Himachal Pradesh is announced for?
6. What benefits are provided under "Himachal GrihiniSuvidhaYojna" by Government of Himachal Pradesh?
7. What is the rank and medals won by India in Asian Games 2018?
8. Give three Qualitative Instruments of monetary policy used by Reserve Bank of India.
9. Which constitutional amendments are related to anti defection Indian constitution?
10. Why Gandhi ji called off the Non-Cooperation movement?
11. Give three literary works associated with Mahatma Gandhi?
12. What is restricting India to join OBOR project of China even when all neighbours expect Bhutan are joining it?
13. What does COMCASA suggests? India has recently signed this agreement with which nation?
14. What is Article 35A?
15. What are key targets of agriculture export policy 2018 to double the farmer's income in the country by 2022?
16. Where does the Global Wage Report 2018-19 published by International Labour Organization (ILO) fix standing of India in Gender wage gap?
17. What do you mean by ZBNF?
18. Mention the famous folk dances performed by the people of Kullu District.
19. List the item that has got status of Geographical Indications in Himachal Pradesh.
20. List the Paramvir Chakra (India's highest military decoration, awarded for displaying distinguished acts of valour during wartime) winner from Himachal Pradesh.

SECTION-B

(3 marks each; maximum 35 words)

Given below are the names of some places. Explain who are they and why have they been in news recently:

1. Duqm
2. Dabolim

3. Notre Dame Cathedral
4. Athens
5. Singphan
6. Chadayamangalam
7. AlichingaTengai
8. Nizamabad
9. Tashigang
10. Cau Van

SECTION-C

(3 marks each; maximum 35 words)

Given below are the names of some persons. Explain who are they and why have they been in news recently:

1. ChandramouliRamanathan
2. Justice SA Bobde
3. Karambir Singh
4. Army General (Retd.) Dalbir Singh Suhag
5. NarthakiNataraj
6. Julian Assange
7. Justice Madan B Lokur
8. KanishakKataria
9. Kylie Jenner
10. David Malpass

SECTION-D

(20 marks each; maximum 350 words)

1. Critically analyse the significance and relevance of politics and ideals Mahatma Gandhi represented and sacrificed his life for.
2. Discuss the impediments India is facing in its pursuit of a permanent seat in UN Security Council.
3. With respect to the South China sea, maritime territorial disputes and rising tension affirm the need for safeguarding maritime security to ensure freedom of navigation and over flight throughout the region. In this context, discuss the bilateral issues between India and China.
4. Describe the impact of casteism upon the Indian electoral system. Substantiate your answer with examples.
5. Discuss the major thrust areas of industrial growth in Himachal Pradesh. What are the major impediments in the industrial growth of Himachal Pradesh and what way-out would you suggest? Also brief about recent initiatives of Himachal Pradesh Government.

***To get detailed solution of this paper Call us at:
Chandigarh: 92164-42200, Shimla: 86288-68800***

HPSAS (MAIN) – 2019

GENERAL ENGLISH

MODEL TEST PAPER-1

(Compulsory)

SCHEDULED DATE BY HPPSC-25-06-2019 (2:00-5:00 PM)

Time: 3 Hours

Maximum Marks: 150

Q1. Read the passage given below and answer the questions that follow. (12)

Humans have probably always been surrounded by their kin – those to whom they have been related by blood or marriage. But the size, the composition, and the functions of their families and kinship groups have varied tremendously. People have lived not only in the “nuclear family”, made up of just the parents and their offspring, which is standard in the West and has been found almost everywhere, they have lived in extended families and in formal clans; they have been “avunculocal”; they have been “ultraliberal”, they have been conscious of themselves as heirs of lineages hundreds of generations deep. However constructed, the traditional kinship group has usually provided those who live in it with security, identity, and indeed with their entire scheme of activities and beliefs. The nameless billions of hunter-gatherers who have lived and died over the past several million years have been embedded in kinship groups, and when people started to farm about ten thousand years ago, their universe remained centered on kinship. Now that there was a durable form of wealth which could be hoarded-grain-some families became more powerful than other; society became stratified, and genealogy became an important means of justifying and perpetuating status. During the past few centuries, however, in part of the world-in Europe and the countries that have been developing along European lines-a process of fragmentation has been going on. The ties and the demands of kinship have been weakening, the family has been getting smaller and, some say, less influential, as the individual, with a new sense of autonomy and with new obligations to himself (or, especially in the last decade and a half, to herself), has come to the foreground. A radically different mental order-self-centered and traceable not to any single historical development as much as to the entire flow of Western history since at least the Renaissance has taken over. The political and economic effects of this rise in individual self-consciousness have been largely positive: civil rights are better protected and opportunities are greater in the richer, more dynamic countries of the West; but the psychological effects have been mixed, at best. Something has been lost: a warmth, a sanity, and a supportiveness that are apparent among people whose family networks are still intact. Such qualities can be found in most of the Third World and in rural pockets of the U.S., but in the main stream of post-industrial society the individual is increasingly left to himself, to find meaning, stability, and contentment however he can. An indication of how far the disintegration of traditional kinship has advanced is that a surprising number of Americans are unable to name all four of their grandparents. Such people have usually grown up in step-families, which are dramatically on the rise. So is the single – parent family-the mother-child unit, which some anthropologists contend is the real nucleus of kinship, having already contracted to the relatively impoverished nuclear family, partly as an adaptation to industrialization kinship seems to be breaking down even further. With the divorce rate in America at about fifty percent and the remarriage rate at about seventy five, the traditional Judeo-Christian scheme of marriage to one person for life seems to be shading into a pattern of serial monogamy, into a sort of staggered polygamy, which some anthropologists, who believe that we aren't naturally monogamous to begin with, see as “a return of normality”. Still other anthropologists explain what is happening somewhat differently; we are adopting delayed system of marriage, they say, with the length of the marriage chopped off at both ends. But many

adults aren't getting married at all; they are putting "self-fulfillment" before marriage and children and are having nothing further to do with kinship after leaving their parents' home; their family has become their work associate or their circle of best friends. This is the most distressing trend of all; the decline in the capacity of long- term intimate bonding.

Questions:

1. The traditional kinship group provides:
 - a) Security b) Identity c) Entire scheme of activity d) All of the above
2. Which of the following is indicative of the extent of disintegration of kinship groups?
 - a) A large number of Americans are unable to name all four of their grandparents.
 - b) Growing number of single-parent families.
 - c) Increase in the average age at which males get married.
 - d) Both a) and b).
3. Which of the following statements is not true?
 - a) When people started to farm ten thousand years ago, kinship became less important.
 - b) Some families became more powerful than others after farming was initiated.
 - c) Genealogy became an important means of perpetuating status after the advent of farming.
 - d) Stratification of society was a result of hunter – gatherers taking up farming.
4. According to the author, what has been sacrificed with the rise in individual self-consciousness?
 - a) Sanity b) Supportiveness c) Warmth d) All of the above
5. The theme of the passage is which of the following?
 - a) The impact of the deterioration of kinship of groups on third world countries.
 - b) The correlation between the decline of traditional kinship groups and stratification of society.
 - c) The changes that have occurred to kinship group pattern and the effect of those changes on the individuals.
 - d) The political and economic repercussions of the decline of the nuclear family.
6. What does the author mean by serial monogamy?
 - a) Judeo-Christian scheme of marriage. b) Marriage to one person for life.
 - c) A sequence of marriages and divorces. d) Delayed marriage.
7. Which of the following statements cannot be inferred from the above passage?
 - a) Smaller families are more autonomous and influential.
 - b) The rise of the individuals can largely be viewed as a western phenomenon.
 - c) A different mental order is in evidence and can be traced to the renaissance period.
 - d) Mainstream post-industrial society would benefit from a resurgence of kinship groups.
8. The word "genealogy" refers to:
 - a) family history b) kinship groups c) family authority d) nuclear family
9. According to the passage, the most distressing trend is:
 - a) Many adults are putting "self-fulfillment" before marriage and children and aren't getting married at all.
 - b) The American divorce rate of 50 percent and remarriage rate of 75 percent.

- c) The contraction of the nuclear family to the mother – child unit.
- d) The inability to develop lasting personal relationship.

10. According to the passage, which statement is not true of kinship group fragmentation?
- a) It is apparent that in Europe and countries developing along European lines a process of fragmentation has been taking place during the past few centuries.
 - b) A self-centered mental order has replaced the earlier kin-centered mental order and it can be traced to a specific historical development.
 - c) The political and economic benefits of the rise of the individuals have not been largely positive.
 - d) Psychological effects of the rise of the individuals have been both positive and negative.

Q2. Make a précis of the following passage in about one-third of its length. Please do not give a title to it. Précis should be written in your own language. (22)

If this century has, in the famous phrase, made the world safe for democracy, the next challenge is to make a world safe for diversity. It is in India's interest to ensure that the world as a whole must reflect the idea that is already familiar to all Indians — that it shouldn't matter what the color of your skin is, the kind of food you eat, the sounds you make when you speak, the God you choose to worship (or not), so long as you want to play by the same rules as everybody else, and dream the same dreams. It is not essential in a democratic world to agree all the time, as long as we agree on the ground rules of how we will disagree. These are the global principles we must strive to uphold if we are to be able to continue to uphold them securely at home.

We want a world that gives us the conditions of peace and security that will permit us to grow and flourish, safe from foreign depredations but open to external opportunities. Whether global institutions adapt and revive will be determined by whether those in charge are capable of showing the necessary leadership. Right now many of us would suggest that there is a global governance deficit. Reversing it would require strong leadership in the international community by a number of powers, including the emerging ones. India is an obvious contender to provide some of that leadership. India should aim not just at being powerful - it should set new standards for what the powerful must do.

This is a huge challenge, and one to which India must rise. An analogy from another field is not encouraging; many would argue that, India has not acquitted itself well when given the chance to have global impact in one domain — that of the sport of cricket, where India accounts for more than 80 percent of the game's revenues and perhaps 90 percent of its viewership, giving it an impact on the sport that no country can rival. Clearly, international opinion does not believe that in its domination of world cricket; India has set new standards for what the powerful must do.

Broadening the analogy to global geopolitics, one could well say: India, your world needs you.

So India must play its due part in the stewardship of the global commons (including everything from the management of the Internet to the rules governing the exploitation of outer space). We can do it. India is turning increasingly outward as a result of our new economic profile on the global stage, our more dispersed interests around the world, and the reality that other countries, in our neighborhood as well as in Africa, are looking to us for support and security. India has the ability and the vision to promote global partnerships across the broad range of its interests; it only needs to act.

The world economic crisis should give us an opportunity to promote economic integration with our neighbors in the subcontinent who look to the growing Indian market to sell their goods and maintain their own growth. But as long as South Asia remains divided by futile rivalries and some continue to believe that terrorism can be a useful instrument of their strategic doctrines that is bound to remain a distant prospect. We in South Asia need to look to the future, to an interrelated future on our subcontinent, where geography becomes an

instrument of opportunity in a mutual growth story, where history binds rather than divides, where trade and cross- border links flourish and bring prosperity to all our peoples.

Q.3 Read carefully the passage below and write your answers to the questions that follow in clear, correct and concise language: (12)

A complete reading program, therefore, should include four factors: at least one good book each week, a newspaper or news magazine, magazines of comment and interpretation, and book reviews. If you keep feeding your intelligence with these four foods, you can be sure that your brain cells will be properly nourished. To this must be added the digestive process that comes from your own thinking and from discussion with individuals or groups.

It is often desirable to make books that you own personally part of your mind by underlining or by marking in the margin the more important statements. This will help you to understand the book as you first read it, because out of the mass of details you must have selected the essential ideas. It will help you to remember better the gist of the book, since the physical act of underlining, with your eyes on the page, tends to put the thought more firmly into your brain cells. It will save time whenever you need to refer to the book.

Above all, never forget that creative intelligence is correlation of facts and ideas, not mere memorizing. What counts is what you can do with your knowledge, by linking it with other things you have studied or observed. If you read Plutarch's life of Julius Caesar, think how his rise to political power paralleled the technique of Adolf Hitler, or that of your local political boss. If you read a play by Shakespeare, think how his portrayal of the characters helps you to understand someone you know. In everything you read, keep at the back of your mind what it means to your life here and now, how it supports or challenges the things you were taught in school, in church and at home, and how the wisdom you get from books can guide you in your thinking, in your career, in your voting as a citizen and in your personal morals.

Questions:

- What are the four things required for a complete reading program and why? (4)
- What else is required to feed your intelligence? (4)
- Why does the writer recommend underlining or marking in the margin the more important statements? (4)
- What use can you put your knowledge to? (2)
- How can what you learn from books help you in your life? (2)
- Give a suitable title to the passage. (2)

Q4. Write an essay in about 250 words on: (40)

Role of the press in changed Global Scenario.

Or

Silence: The Path of Wisdom.

Or

Move for Ecological Security.

Q5. Rewrite each of the following sentences as directed without changing the meaning: 1x10=10

- He finished his exercise and put away his books. = He completed.....
- In the event of his being late, he will be punished. = In consequence.....
- He said to me, "I have often told you not to play with fire." = Do not.....
- He said that he had come to see them. = He wanted.....
- He drove too fast for the police to catch. = He did not.....

Q6. Make suitable changes in the sentences to fulfill the following requirements: 1x10=10

- a) The audience loudly cheered the Mayor's speech. (Change into passivevoice)
- b) A reward was given to him by the Governor. (Change into activevoice)
- c) Sita is not one of the cleverest girls in the class. (Change into comparative degree)
- d) I was doubtful whether it was you. (Change into negative form)
- e) It is sad to think that youth should pass away. (Change into exclamatory sentence)

Q7. Change the voice of the following sentences: 5x2=10

- a) One may accomplish anything with a little effort.
- b) A thunderstorm often turns milk sour.
- c) The boy was climbing the cliff.
- d) Will you ever forget those happy days?
- e) All desire wealth and some acquire it.

Q8. Provide interrogative words to the following: 1x10=10

...a..... the bus already left?b..... you clean up your room?c this the right way to keep Your baggage?d..... many times will you ignore such a mess?e.... will you grow up?f..... it your duty to set things in order?g.... expect other people to do your work.....h. you not responsible for your own actions?i..... harm does it cause to do your own work?.....j you spare some time for it?

Q9. Fill in the blanks with correct prepositions in the following dialogue: 10 x 1=10

Marielives.....a an apartment in Paris. Her apartment isb.....the tenth floor of a very big apartment building.....c her apartment she can see Pariswell.....d. example her apartment is near the Eiffel tower. Every year moree..... fifteen million tourists come to Paris. Most tourists visit.....f. the summer. It is difficult to find a good hotel roomg.... July. They comeh. a long list of things to do in Paris. Many people like to take a picturei.... the Eiffel tower.They....j like to visit the many old buildings in the city.

Q10. Supply the correct articles (a, an, the) in the blanks below. If no article is required, put 'o' in the blank: 10x1=10

Greeks like...a coffee.
 English likeb. tea.
c exercise he is writing is very easy.
d. exercise is good for our health.
 He lives ine Japan.
 Isf. Chinese easy?
 ...g. Chinese language is difficult.
 Mr. Brown ish. teacher.
 They took him to ...i hospital in.....j ambulance.

**To get detailed solution of this paper Call us at:
 Chandigarh: 92164-42200, Shimla: 86288-68800**

HPSAS (MAIN) – 2019

GENERAL HINDI

MODEL TEST PAPER-1

(Compulsory)

SCHEDULED DATE BY HPPSC-26-06-2019 (2:00-5:00 PM)

Time: 3 Hours

Maximum Marks: 150

1. अवतरण 30

Do you have enemies? Good. That means you have stood up for something! That is what of the 'Principled' character says in Dan Browns' book, "origin". The message that is meant to be sent across is that one should always stand up for something or the other at any given point in the long journey of life. Only then one can be said to be leading a good life.

A man of principles will necessarily have a positive mind and good character. And that makes him a lovable person. Such a person is like a candle that shines even when it flickers in its least movements. Generally, any person or anything that comes in your way becomes an obstacle in the fulfillment of your mission of life, can be perceived as your enemy.

Whenever the nature of your enemy, you have to take it as yet another obstacle in your way and surmount it with great care and determination. Such obstack have to be taken as tests that have to pass any way in order to show your willingness to do something good and beneficial.

2. **संविधान के अन्तर्गत भारत में नागरिकता का प्रावधान - (15)**

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Page 10 of 10

प्रश्न 3. निम्नलिखित में से एक को चुनिए और (40)

- (क) निम्नलिखित में से एक को चुनिए और (40)
- (ख) बुद्ध ने निम्नलिखित में से एक को चुनिए और (40)
- (ग) निम्नलिखित में से एक को चुनिए और कब तक

प्रश्न 4. निम्नलिखित में से एक को चुनिए और (20)

1. निम्नलिखित में से एक को चुनिए और (20)
2. निम्नलिखित में से एक को चुनिए और (20)
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5. निम्नलिखित में से एक को चुनिए श (20) तक
6. निम्नलिखित में से एक को चुनिए (20) तक
7. वह निम्नलिखित में से एक को चुनिए (20) तक
8. निम्नलिखित में से एक को चुनिए वन (20) गई
9. निम्नलिखित में से एक को चुनिए (20) तक
10. निम्नलिखित में से एक को चुनिए (20) पड़ गई।

प्रश्न 5.(क) निम्नलिखित में से एक को चुनिए और (10)

- 1) निम्नलिखित में से एक को चुनिए (10)
- 2) निम्नलिखित में से एक को चुनिए (10)
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- 6) निम्नलिखित में से एक को चुनिए (10)
- 7) न निम्नलिखित में से एक को चुनिए न निम्नलिखित में से एक को चुनिए (10)
- 8) निम्नलिखित में से एक को चुनिए (10)
- 9) निम्नलिखित में से एक को चुनिए (10)

(ख) निम्नलिखित में से एक को चुनिए और (10)

- 1) Abatement
- 2) Absconder
- 3) Ground zero
- 4) Memorandum of understanding (M.O.U)
- 5) Mercy petition
- 6) Paradigm
- 7) real estate
- 8) Sabotage
- 9) Strenuous
- 10) Subsequent

(ग) निम्नलिखित में से एक को चुनिए और (5)

1. ईश्वर निम्नलिखित में से एक को चुनिए जलन
2. निम्नलिखित में से एक को चुनिए (5)
3. निम्नलिखित में से एक को चुनिए (5)

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5. तम

**To get detailed solution of this paper Call us at:
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My name is Arshiya Sharma (HAS - 18th Rank - ETO)
The entire journey of my preparation has been guided
by nimbus. The institute and the administration helped
in every step of the way. The prelims and mains test
series, the mock interviews and the all time available guidance
of the teachers helped me get where I am today.
I thank NIMBUS and all the staff for their constant
support and motivation and providing a well paved way
for the preparation.

Thank You
Arshiya



ARSHIYA SHARMA

HAS-2018

RANK-18

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