

**GS SCORE**



Model Hints

UPSC Mains 2017

# Model Hints

**GENERAL STUDIES**

**Paper - I**

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# UPSC MAINS 2017

## GS PAPER - 1

*Time Allowed: 3 hr.*

*Max. Marks: 250*

1. How do you justify the view that the level of excellence of the Gupta numismatic art is not at all noticeable in later times? (150 words)
2. Clarify how mid-eighteenth century India was beset with the spectre of a fragmented polity (150 words)
3. Why did the 'moderates' fail to carry conviction with the national about their proclaimed ideology and political goals by the end of the nineteenth century? (150 words)
4. What problems were germane to the decolonization process in the Malay Peninsula?(150 words)
5. How does the Juno Mission of NASA help to understand the origin and evolution of the Earth? (150 words)
6. "In spite of adverse environmental impact, coal mining is still inevitable for development." Discuss. (150 words)
7. Mention the advantages of the cultivation of pulses because of which the year 2016 was declared as the International Year of Pulses by the United Nations. (150 words)
8. How does the cryosphere affect global climate? (150 words)
9. In the context of the diversity of India, can it be said that the regions form cultural units rather than the States? Give reasons with examples for your viewpoint. (150 words)
10. What are the two major legal initiatives by the State since Independence addressing discrimination against Scheduled Tribes (STs)? (150 words)
11. The spirit of tolerance and love is not only an interesting feature of Indian society from very early times, but it is also playing an important part at the present. Elaborate. (250 words)
12. Examine how the decline of traditional artisanal industry in colonial India crippled the rural economy. (250 words)
13. Highlight the importance of the new objectives that got added to the vision of Indian Independence since the twenties of the last century. (250 words)
14. Account for variations in oceanic salinity and discuss its multi-dimensional effects. (250 words)
15. Petroleum refineries are not necessarily located nearer to crude oil producing areas, particularly in many of the developing countries. Explain its implications. (250 words)
16. In what way can floods be converted into a sustainable source of irrigation and all weather inland navigation in India? (250 words)
17. What characteristics can be assigned to monsoon climate that succeeds in feeding more than 50 percent of the world population residing in Monsoon Asia? (250 words)

18. The women's questions arose in modern India as a part of the 19th century social reform movement. What were the major issues and debates concerning women in that period? **(250 words)**
19. Distinguish between religiousness/religiosity and communalism giving an example of how the former has got transformed into the latter in independent India. **(250 words)**
20. "The growth of cities as I.T hubs has opened up new avenues of employment, but has also created new problems." Substantiate this statement with examples. **(250 words)**



GS SCORE

# UPSC MAIN EXAMINATION PAPER - 1

## HINTS

1. *How do you justify the view that the level of excellence of the Gupta numismatic art is not at all noticeable in later times?*

*Hints:*

According to some scholars, the most glorious period of ancient Indian history is the rule of the Gupta dynasty. They ruled large parts of northern India from early 4th century CE to mid-6th century CE. The flourishing state of economy can be ascertained from the large number of gold coins circulated by different Gupta rulers.

The Gupta monarchs were famous for their gold coins. They also issued silver coins. However, coins made of copper, bronze or any other alloy metals are scarce. The abundance of gold coins from the Gupta era has led some scholars to regard this phenomenon as the 'rain of gold'.

The Gupta gold coin is known as dinaras. The gold coins of the Gupta rulers are the extraordinary examples of artistic excellence. The coins depicted the ruling monarch on the obverse and carried legends with the figure of a goddess on the reverse.

The artists depicted the ruler in various poses. The study of these imageries is very interesting. Mainly the images celebrated the martial qualities and the valor of the ruler. In many coins of Samudragupta, he is depicted as carrying an axe. In others, he is carrying a bow in his left hand and an arrow in his right hand. The coins of Kumaragupta I (c. 415-450 CE) depicted him riding an elephant and killing a lion. Another very interesting image of Samudragupta depicted him as playing a 'veena', a stringed musical instrument. There are also some instances of Gupta coins which were jointly issued by the king and the queen. The 'king-queen' types of coins were issued by Chandragupta I, Kumaragupta I, and Skandagupta. These coins depicted both the figures of the king and queen in a standing pose. Kumaradevi, the name of the queen of Chandragupta I is known from these coins. But the other two kings did not mention the name of their queens in their joint issues.

The 'Asvamedha' or horse-sacrifice coins were issued by both Samudragupta and Kumaragupta I.

Almost every Gupta coin carried the figure of a goddess and an inscription in the reverse. Sanskrit was the language of the inscription. The goddess posed in either sitting or a standing position. There were many goddess depicted in these coins. The most common was the image of Laxmi, the Hindu goddess of wealth. Other goddesses who featured in the Gupta coins included Durga, the Hindu goddess of valor; Ganga, the goddess of the river Ganges; etc.

Some of the Gupta coins, mainly the silver ones, carried the images of Garuda, a mythical bird of Hindu tradition. These coins are found in large numbers in western India. In some cases, the Garuda is replaced by a peacock. This variety of coins is extremely rare. And thus, carry a great value for the numismatists.

The first hoard of the Gupta coins was found at Kalighat, in Calcutta in 1783.

The collapse of the Gupta dynasty in the fifth century under the pressure of foreign invasions from the north-west led to the demise of the golden age of Guptas reflected most conspicuously in the coinage of the sub-continent. The post-Gupta period saw various regional coinages which were poor in terms of artistic value and minted in baser alloys like billon (silver and copper). The period is seen as a period of numismatic decline in terms of circulation with fewer coins found as coin hoards (buried treasures).

The Guptas were temporarily replaced by the Huns or the Indo-Hepthalites who invaded and occupied the Western parts of the country via Kabul-Qandahar route. Toramana, the Hun leader issued silver and copper coins fashioned on the coins of Sassanid rulers of North-West India; he also issued silver coins based on Gupta coinage turning the king's head to the left and with 'Toramana Deva' inscribed on the reverse.

Toramana's Indo-Sassanid coins have a typical bust of the King facing right on the obverse and a Sassanid fire altar with Gupta Brahmi legends on reverse. Toramana ruled over Malwa region till 510 A.D. but his successor, Mihirkula was driven off Malwa by the joint forces of Narsimha Gupta 'Baladitya' and Yashovarman of Malwa in 528 A.D. He captured Kashmir and issued coins based on the Sassanid standards with 'Jayatu Mihirkula' engraved in Brahmi on the reverse.

Regional coinages continued to be highly influenced by the Gupta coinage; in Bengal, two kings, Samacharadeva and Jayagupta issued debased gold coins resembling the archer type of Guptas with a Bull standard on the coins. The reverse has Lakshmi seated on a lotus suggesting that Samacharadeva replaced the last Gupta ruler, Vishnu Gupta in the middle of the sixth century.

The next major coinage from Bengal was by Sashanka, the king of Gauda who was the rival of Maukharis of Kannauj and their famous ally, Harshavardhana. The coins have images of Shiva reclining on Nandi on the obverse and Lakshmi seated on lotus flanked by an elephant on the reverse.

At the beginning of the seventh century, the entire North India came under the sway of Harshavardhana, the ruler of Thaneshwar, a small principality near Kurukshetra. Harsha was a great patron of arts, Buddhism etc. However, Harsha did not initiate any new coinage in his four decade reign. Instead, he chose to copy the 'Eastern peacock' type of Kumaragupta with the king's portrait turned to left.

## 2. Clarify how mid-eighteenth century India was beset with the spectre of a fragmented polity.

### Hints:

During the first half of the eighteenth century, with Aurangzeb's misguided policies which weakened the stable Mughal polity and failure of later Mughals like Muhammad Shah's rule from 1719 to 1748 reshaped the boundaries of the Mughal Empire by the emergence of a number of independent kingdoms.

### Major Political units of that time:

- Through the 18th century, the Mughal Empire gradually fragmented into a number of independent, regional states.
  - Successor States Hyderabad, Bengal and Awadh were the three cases where provincial governors under the Mughals set up independent states.
  - The second group of regional states were the 'new states' or 'insurgent states' set up by rebels against the Mughals-the Marathas, Sikhs, Jats and Afghans.
  - The independent states like Mysore, the Rajput states and Kerala fall in this category.
- The Mughal empire's influence was not as widespread or deep as was believed. Significant parts of India, especially in the North East and South, remained outside it, as did many social groups.

Despite fragmented polity there was survival of the Mughal tradition of government, as the prestige of the emperor was quite considerable despite the increasing influence of the rebel chiefs of the Marathas and Sikhs.

The third battle of Panipat proved significant as British significantly gained with Maratha defeat and British got a tremendous opportunity to expand their influence in Bengal and India.

## 3. Why did the 'moderates' fail to carry conviction with the national about their proclaimed ideology and political goals by the end of the nineteenth century?

### Hints:

Congress politics during the first twenty years of its history is known as moderate politics. They did demand equality. They equated liberty with class privilege and wanted gradual or piecemeal reforms. British rule for most of them seemed to be an act of providence destined to bring in modernisation. Indians needed some time to prepare themselves for self-government.

Their politics was very limited in terms of goals and methods. They believed in peaceful and constitutional agitation as opposed to popular means of agitation.

- They had a two-pronged methodology
  - to create a strong public opinion to arouse consciousness and spirit and to unite and educate people on common political questions
  - Persuade the British to introduce reforms in India on the lines laid out by nationalists.
- Their immediate demand was not for full self-government or democracy. They demanded democratic rights for the educated members of the Indian society,

#### **Why did they fail?**

- They did not understand the true nature of the British rule.
- The social composition of the moderate politicians resulted in social orthodoxy as social questions were not to be raised in the congress sessions till 1906.
- Narrow social base and did not penetrate down to the masses as the leaders also did not have faith in them.
- They failed to realise that the masses could prove to be the real driving force in the movement. The contradictions in moderate politics made it more limited and alienated from the greater mass of the Indian population. This was related to the social background of the mostly belonged to propertied classes. So, congress could not take a logical stand on peasant questions.
- Pray, petition and protest type of politics could not turn to be effective
- Bengal was divided against the will and wish of people.
- Rise of extremist leaders like Tilak appealed more to the masses than moderates

Despite the failures, their contribution was enormous in legislative councils even though they had no real official power till 1920. They played significant role in the Indianisation of civil services, demanding that military expenditure should evenly be shared by the British, economic critique of imperialism, defence of civil rights

#### **4. What problems were germane to the decolonization process in the Malay Peninsula?**

##### **Hints:**

When the British came to Malaysia in the late 1700's. in the late 1800's the British east Indian company traded and partly controlled. At that time, they began looking for a base in Malaya.

During the British rule of Malaysia, Chinese laborer came to Malaya, as miners, merchants and planters, just like people from sub-Saharan Africa were taken to America as slaves, but it wasn't as severe.

Similarly, they took South Indians there as slave labour, this created a complex ethnic and religious mix, which made it a big challenge to determine the national boundaries on ethno-language-religion basis.

Similarly, the question of retaining the Singapore, where British had made large investments was also a big problem to start with. Ultimately several small provinces came-up apart from large province of Malay, together they merged in 1963 to form the union of Malaysia, However, later in 1965, Singapore left the union.

British rule brought profound effects on the nation, transforming the state socially and comically. After some initial resistance in remote areas such as Borneo, the eventually reached peace and cooperation. The British devoted much effort in constructing transport infrastructure in Malaya, reduce incidents in tropical diseases, improved public health facilities.

#### **5. How does the Juno Mission of NASA help to understand the origin and evolution of the Earth?**

##### **Hints:**

Juno is a NASA spacecraft. It is exploring the planet Jupiter. Juno launched from Earth in 2011. The spacecraft did not land. Juno is called an "orbiter." This kind of spacecraft flies around, or orbits, a planet.

As it is being said that the story of evolution of Jupiter is the story of the solar systems thus Juno's principal goal is to understand the origin and evolution of Jupiter. Underneath its dense cloud cover, Jupiter safeguards secrets to the fundamental processes and conditions that governed our solar system during its formation. As our primary example of a giant planet, Jupiter can also provide critical knowledge for understanding the planetary systems being discovered around other stars.

With its suite of science instruments, Juno will investigate the existence of a solid planetary core, map Jupiter's intense magnetic field, measure the amount of water and ammonia in the deep atmosphere, and observe the planet's auroras.

Juno will let us take a giant step forward in our understanding of how giant planets form and the role these titans played in putting together the rest of the solar system.

Specifically, Juno will...

- Determine how much water is in Jupiter's atmosphere, which helps determine which planet formation theory is correct (or if new theories are needed)
- Look deep into Jupiter's atmosphere to measure composition, temperature, cloud motions and other properties
- Map Jupiter's magnetic and gravity fields, revealing the planet's deep structure
- Explore and study Jupiter's magnetosphere near the planet's poles, especially the auroras - Jupiter's northern and southern lights - providing new insights about how the planet's enormous magnetic force field affects its atmosphere.

6. *"In spite of adverse environmental impact, coal mining is still inevitable for development." Discuss.*

**Hints:**

There are numerous damaging environmental impacts of coal in the form of air and water pollution that occur through its mining, preparation, combustion, waste storage, and transport. Still, coal is inevitable for development because,

- It is by far cheaper than nuclear, natural gas, oil. Hydro usually will be slightly cheaper. However, problems with hydro include: no new facilities because of public outcry when river valleys are dammed; and, peak demand time problems.
- Coal also provides a stable source of energy (no Arab oil embargoes, no sudden scarcity like you experience with natural gas) and there is a very plentiful supply throughout the world.
- Coal provides many jobs. Unlike other forms of energy (nuclear, natural gas, oil, hydroelectric), coal provides many jobs in removing coal from the earth, transporting it to the utility, burning it, and properly disposing of coal ash.
- Even today the alternative source of energy such as solar, nuclear, hydro, etc. is not sufficient enough and cost effective so that they will replace coal as a source of energy.
- Coal also often subsidizes the cost of other freight, making it possible for cargoes of other commodities to get to market, which might not occur in the absence of a dynamic logistical railroad

Thus, in the wake of ever growing population, increasing energy demand and lack of other alternative source of fuel coal seems to be the only source of fuel for the development of the world economy.

7. *Mention the advantages of the cultivation of pulses because of which the year 2016 was declared as the International Year of Pulses by the United Nations.*

**Hints:**

The International Year of Pulses 2016 aims to heighten public awareness of the nutritional benefits of pulses as part of sustainable food production aimed towards food security and nutrition. Some of the advantages are as follows

- Pulse crops can help in the fight against global warming by taking nitrogen from the air rather than from fertilizers, reducing emission of nitrous oxide, a powerful greenhouse gas.

- By diversifying simplified farming systems (specialized around cereal crops), addition of pulse crops allows producers to use fewer agro-chemicals and reduce environmental impact.
- Pulse crops have a significant impact on soil biology, increasing soil microbial activity even after the pulses are harvested.
- Being leguminous crops, they are also responsible for the nitrogen fixation which is important for the other non-leguminous crops taken with pulse crops.
- Moreover, pulses have many functional and nutritional properties both as feed for animals and food for people.
- Pulse crops are less water intensive in nature thus they help in maintaining soil moisture, ground water table and are also useful as a crop for drought prone areas.
- Being proteinaceous in nature they help in overall nutritional security of the nation.

Thus, United Nation is trying to promote the pulse crop for overall development of the agriculture and the consumers as well.

#### 8. *How does the cryosphere affect global climate?*

##### *Hints:*

There are places on Earth that are so cold that water is frozen solid. These areas of snow or ice, which are subject to temperatures below 32°F for at least part of the year, compose the cryosphere.

Impact on global climate:

1. Cryosphere is the region of highest albedo over the earth system. Thus, it helps regulating the overall heat budget of the earth.
2. Due to differences in the temperature of the cryosphere and the tropical regions, the atmospheric phenomenon such as planetary winds, ocean currents etc. occur.
3. Cryosphere is the significant place for carbon sequestration as huge amount of carbon is trapped within these soils in the form of methane.
4. Decrease in cryosphere due to global warming may lead to increase in sea level which will further lead to change in climatic pattern.
5. Because polar regions are some of the most sensitive to climate shifts, the cryosphere may be one of the first places where scientists are able to identify global changes in climate.

Thus, citing sea ice melt, UNEP has urged stronger measures to protect fragile cryosphere environment.

#### 9. *In the context of the diversity of India, can it be said that the regions form cultural units rather than the States? Give reasons with examples for your viewpoint.*

##### *Hints:*

The Indian nation-state is socially and culturally one of the most diverse countries of the world. The billion-plus people speak about hundreds of different languages and dialects. Language coupled with regional and tribal identity and other factors such as food habits have therefore provided the most powerful instrument for the formation of ethno-national identity in India

##### **Regions as cultural units:**

- India can be divided among many major regions, such as southern peninsular India, gangetic belt in north India, western India, North-east of India. While states have been redrawn several times as per popular demand and administrative convenience, regions can't be predetermined as per wish of people and government and it takes a very long time to introduce new regional identity.
- For example, the region of chota-Nagpur has been divided among various states in past, such as MP, Bihar and Bengal and Orissa. However, the people in this region always found more affinity with people of their region even in other states than the people outside their region within their state. This was also the reason, two new states were carved out in that region.

- Thus, in the creation of three new states in 2000, namely Chhattisgarh, Uttaranchal and Jharkhand, language did not play a prominent role. Rather, a combination of ethnicity based on tribal identity, language, regional deprivation and ecology provided the basis for intense regionalism resulting in statehood.
- With respect to food despite diversity clearly visible dishes are regionally dominated like south Indian delicacies like Dosa, Idli are part of not just a particular state but southern region as a whole.
- Despite Delhi being separate political entity along with NCR which is from a different state across it becomes a cosmopolitan cultural region.
- The staple food depends on regions rather than states like Rice is mostly eaten in southern states and West Bengal whereas predominant use of Wheat is in the Northern region.

#### **States as cultural units:**

- Language was the main aspect which made states cultural units. For instance, People from Tamilnadu speak Tamil. And this was the precise reason for creation of Andhra Pradesh. Thus, while a region certainly has a culture and social character, a further specialization happens at even smaller levels, which has been the reason to create various states.
- Some states like Goa, Kerala have unique cultures which are different from other states whether it is with respect to food, dressing, religious views, etc.

#### **10. What are the two major legal initiatives by the State since Independence addressing discrimination against Scheduled Tribes (STs)?**

##### **Hints:**

India has over 10 crore population of 700 tribes which have been notified under Article 342 of the Constitution of India but lack significantly with respect to social parameters like education, health like IMR and MMR etc.

#### **The two most important legal initiatives taken to uplift scheduled Tribes are:**

##### **• Reservation:**

- The Constitution prohibits untouchability under its Article 17, and obligates the state to make special provision for the betterment of the scheduled castes and scheduled tribes
- India provided reservation to scheduled Tribes in education and jobs with 7.5% reservations in government-aided educational institutions and public sector in 1982.
- In parliament, tribe based reservations are provided to make it more representative. Today, out of 543 seats in India's parliament, 47 (8.66%) for ST/Tribes.
- According to a new study, 26% male and 35% female students from India's most disadvantaged castes and tribes in 245 engineering colleges would not be there without reservation.

##### **• Forest rights act:**

- The Act provides for recognition of the rights of communities to govern, use, and conserve forests they have traditionally managed and used, reversing 200 years of colonial and postcolonial history in which the state had taken over control of forests.
- Grants legal recognition to the rights of traditional forest dwelling communities, partially correcting the injustice caused by the forest laws.
- Makes a beginning towards giving communities and the public a voice in forest and wildlife conservation

#### **Some further initiatives are:**

- Encouraging CSR initiatives in education for disadvantaged students.
- Counsel students about opportunities in employment and higher education as well.

- Beyond principle of 'free and prior informed consent' (FPIC) deeper democratic reforms would help tribal people get political, economic, and legal powers through grass-roots collectives that enable them to take decisions affecting their lives.

11. *The spirit of tolerance and love is not only an interesting feature of Indian society from very early times, but it is also playing an important part at the present. Elaborate.*

**Hints:**

Spirit of tolerance and love are an integral part of India's tradition. India has a long history of the culture of tolerance. India is a multi-religious society and has proved to be a peaceful haven for different religions and cultures. From the time of Buddha to Gandhi India has been an exemplary example of tolerance.

**Tolerance in India:**

- According to the traditional way of thinking, India believes in plurality, or in the words of the great Indian leader Mahatma Gandhi, "the many ness of reality"
- In India traditional belief system says that every human being has a content of divinity and accords equal position to every man and woman. This is the genesis of the culture of tolerance in India. This has been applicable for all the religion that were founded in this region, such as Buddhism, Jainism, Hinduism, and Sikhism.
- Swami Vivekananda at the Parliament of the World's Religions said "We believe not only in universal toleration but we accept all religions as true."
- Tolerance is essential because it recognises that there can be more than one path for the attainment of truth and salvation. A tolerant society protects the right to dissent. If there is pervasive intolerance the inevitable consequence will be violence and that would ultimately pose a serious threat to democracy.
- In recent years, there have been various instances of communal and caste clashes, many people in India do not want to rent homes to Muslims, single women and men and people from the northeast but these have largely been in isolation overall India still in fraternity and brotherhood and is one of most tolerant nations in the world.
- It is this tolerance which also shows less recruitment of youth into ISIS when compared to other nations.

**Spirit of Love in India:**

- Love is intrinsic part of Indian community, because since ancient times, be it works of great poets like Kalidasa love is the tradition whether it is in the bhakti tradition, love and respect towards parents, elders, and god have been intrinsically part of Indian thought process.
- Even today when intolerance and respect towards people is being lost India is revered as one of the most cultured countries with respect to family life and relations. Despite the increasing communalism, the situation in India is much better than rest of the world, given its diversity.

12. *Examine how the decline of traditional artisanal industry in colonial India crippled the rural economy.*

**Hints:**

By the standards of the 17th and 18th centuries, before the advent of the Europeans in India, India was the 'industrial workshop' of the world. India's traditional village economy was characterized by the "blending of agriculture and handicrafts".

**Reasons for decline of traditional artisanal industry:**

- **Disappearance of court culture:**
  - With the abolition of the royal court, one source of demand for the products of these crafts dried up.
- **Western education:**

- The consumption habits of newly created Indian 'bourgeoisie' not only disdained the products of the indigenous industries but also tried to copy everything European which was considered to be the "hallmark of enlightenment."
- **The loss of guilds:**
- This led to the adulteration of materials, shoddy and slovenly workmanship, resulting in a decline of the artistic and commercial value of the products.
- **Tariff policy pursued by the British Government**
- This 'one-way free trade' policy which preached that what was good for England was considered to be good for India.
- To put her manufacturing industries on a sound footing at home, England pursued the policy of protection through the imposition of import duties.
- Indian goods were also subjected to high tariffs in the English market whereas the British goods gained duty free access into the Indian markets.
- Indian craftsmen did not clearly understand the forms and patterns which suited European tastes.

As a result of these policies Indian handicrafts faced a severe challenge from the foreign goods. India now became the exporter of raw materials to British industries and an importer of ready-made goods from Britain. This phenomenon of the ruination of Indian handicrafts industries is most well known as Deindustrialization.

**Impact:**

- Destroyed the self-sufficient village economy as the destruction of the traditional industries led to overcrowding in the agrarian sector.
- The artisans were displaced from traditional occupations. Finding no other alternative source of livelihood, the artisans fell back on land.
- Such overcrowding of agriculture badly affected its efficiency. Present problems of subdivision and fragmentation of land holdings, over-cultivation or cultivation of inferior and unproductive land, etc., are the direct effects of the British rule.
- Created a bogey of rural disguised unemployment and underemployment.
- Indeed, women spinners who earned their livelihoods were the worst victims of de-industrialization.
- Ultimately the people were left amidst extreme poverty. Major cottage industries like textile, leather, oil, pottery, etc. were ruined and no alternative source of production was setup in India. Thus, India had to depend on the British manufacturers.

Thus, the process of de-industrialization proved to be a process of pure immiseriation for the several million persons. Exporter India was converted into importer India. Self-sufficient village economic gave way to colonial economy and India was transformed into an agricultural colony to produce and supply raw materials.

**13. Highlight the importance of the new objectives that got added to the vision of Indian Independence since the twenties of the last century.**

**Hints:**

There have been many developments since the twenties of the last century regarding the vision of independence which impacted India even post-independence.

The last stages of the self-rule struggle from the 1920s onwards saw Congress adopt Mohandas Karamchand Gandhi's policy of nonviolence and civil resistance, and several other campaigns. While, nationalists like Subhash Chandra Bose, Bhagat Singh preached armed revolution to achieve self-rule. Also, Congress and Muslim league rift further widened and by late 1930's the link was unbridgeable between them and Pakistan would be a reality.

- After the 1930s, the movement took on a strong socialist orientation, owing to the influence of Nehru in congress and also due to Bhagat Singh's demand of Purna Swaraj (Complete Self-Rule).

- Under the presidency of Jawaharlal Nehru at the historic Lahore session in 1929, the Indian National Congress adopted the idea of complete self-rule and end of British rule.
- The non-cooperation movement made the Indian people strive even more towards self-rule. The movement allowed the Indian community to revive their inner confidence and strength against the British Government.
- Fundamental rights, land issues, labour issues were widely discussed so larger societal problems were acknowledged which provided a framework on which India could act post-independence as well.
- The peasant movements in 1920's and 1930's like Kisan Sabha movement, Eka movement, got integrated at national stage and also within congress framework, All India Kisan Sabha brought peasants together and made congress actively involved in peasant issues which helped while resolving land reforms post-independence.
- The Indian political spectrum was further broadened in the mid-1920s by the emergence of both moderate and militant parties, such as the Swaraj Party, Hindu Mahasabha, Communist Party of India and the Rashtriya Swayamsevak Sangh.
- Lower castes under the leadership of Ambedkar and also because of Gandhi's efforts, were recognized as worst sufferers, who were affected by both British and upper-caste Indians.
- Many women participated in the movement, including Kasturba Gandhi (Gandhi's wife), Rajkumari Amrit Kaur, Muthulaxmi Reddy, Aruna Asaf Ali, and many others.

**14. Account for variations in oceanic salinity and discuss its multi-dimensional effects.**

**Hints:**

Salinity is defined as the ratio between the weight of the dissolved materials and the weight of the sample sea water. The average salinity in the oceans and the seas is 35‰ however it has significant spatial variations as follows

- **Horizontal Distribution**
  - i) On an average salinity decreases from equator towards poles. However highest salinity is recorded at tropics and not at the equator because of high rainfall at equator.
  - ii) Marginal areas of the oceans bordering the continents have lower salinity than their central parts because freshwater is added to the marginal areas through the rivers.
  - iii) There is no control of latitudes on the distribution of salinity in the inland seas as salinity of the partially enclosed seas in higher latitudes is controlled by influx of melt water. E.g. Baltic Sea records relatively lower salinity than the North Sea though both are in almost same latitude.
- **Vertical Distribution**
  - i) Salinity increases with increasing depth in high latitudes.
  - ii) Salinity is low at the surface at the equator due to high rainfall and transfer of water through equatorial currents but higher salinity is noted below the water surface.
  - iii) However, on an average higher salinity is found in the upper layer of the oceanic water and it decreases with depth.
  - iv) Thus, the upper zone of maximum salinity and the lower zone of minimum salinity is separated by a transition zone which is called Halocline zone.

**Effects of variation in ocean salinity**

- The freezing and boiling points are greatly affected and are controlled by addition or subtraction of salts in seawater.
- Salinity and density of seawater are positively correlated.
- Evaporation is controlled by salinity of the oceans thus the tropical cyclones which are driven by evaporation are indirectly controlled by salinity.

- Coral reefs which are important for marine biodiversity can thrive only in saline water.
- Spatial variation in seawater salinity is a potent factor in the origin of ocean currents.
- It affects marine organisms and plant community.

15. *Petroleum refineries are not necessarily located nearer to crude oil producing areas, particularly in many of the developing countries. Explain its implications.*

**Hints:**

An oil refinery or petroleum refinery is an industrial process plant where crude oil is processed and refined into more useful products such as petroleum naphtha, gasoline, diesel fuel, asphalt base, heating oil, kerosene, and liquefied petroleum gas.

Some of the reasons for petroleum refineries not located near oil fields are

- For Petroleum refineries, the raw material sources were less decisive factors for industrial location. Because industries were already setup in coalfields and did not move away due to industrial inertia.
- Petroleum refining does not lead significant weight-loss, unlike the aluminum/copper/sugarcane/timber processing.
- Virtually all the by-products can be used. Therefore, refineries can be set up
  1. near the raw material or
  2. near the market or
  3. at an intermediate break of the bulk location (ports/coastal locations)
- Multinational companies do not feel confident to setup refineries inside the middle-east or South America because of Arab-Israel war, Israel-Palestine issue and other terrorist activities.
- In country such as India mostly government has established oil refineries just to develop the growth pole in that region E.g. Mathura oil refinery, Panipat oil refinery etc.
- In the wake of development of various oil and gas pipelines the importance of oil field as a locational factor for refinery industry has reduced.

**Implications**

- If the refinery is situated closer to oil fields then once the oil is exhausted the refinery will also become useless.
- Oil refining close to production site represents a weight loss of 10-11 % only thus not much cost saving in transport even if located near raw material site.
- In India it has helped in the development of the cities such as Mathura, Panipat by providing employment opportunities.

16. *In what way can floods be converted into a sustainable source of irrigation and all weather inland navigation in India?*

**Hints:**

The term flood is generally used when the water-flows in rivers, streams and other water bodies cannot be contained. Floods occur regularly in India affecting about 12% of area.

**Floods as sustainable source of irrigation**

- Reducing run-off
  - Infiltration method through afforestation
  - Through digging wells
  - Biopore infiltration method

- Reducing flood peaks by volume reduction
  - By constructing dams and detention basins
  - Marshy areas, old quarries and mines can act as detention basins
- Reducing flood level
  - Stream channelization (close network of canals reduces flood hazard)
- Flood diversion
  - It includes diverting flood water in marshes, depressions and spreading it thinly over paddy fields and dry lands E.g. Ghaggar Reversion Scheme.

#### **Flood as all-weather inland navigation**

- By the method of network of canals from the flood prone rivers the water in canal can also be used for inland navigation.
- Interlinking of rivers will help in pan India development of inland navigation.
- Channel improvement can also be done by deepening, widening, straightening, lining and cleaning out of vegetation and debris from river channel.

#### **17. What characteristics can be assigned to monsoon climate that succeeds in feeding more than 50 percent of the world population residing in Monsoon Asia?**

##### **Hints:**

The tropical monsoon climate experiences abundant rainfall like that of the tropical rain forest climate, but it is concentrated in the summer season. The monsoon type of climate has helped in defining the Asian culture, economy, polity and way of living on a large scale. Some of its characteristics are,

- The major controlling factor over the monsoon climate is its relationship to the monsoon circulation. The Monsoon is a seasonal change in wind direction.
- It is mostly associated with on-shore wet monsoons in the summer and off-shore dry monsoons in the winter.
- The rainfall caused by this climate is torrential in nature.
- They are best developed in the Indian sub-continent, Burma, Thailand, Laos, Cambodia, parts of Vietnam and south China
- Outside this zone, the climate is modified by the influence of the on-shore Trade Winds all the year round, and has a more evenly distributed rainfall.
- The basic cause of monsoon climates is the difference in the rate of heating and cooling of land and sea.
- The natural vegetation of tropical monsoon lands depends on the amount of the summer rainfall. Trees are normally deciduous because of the marked dry period, during which they shed their leaves to withstand the drought.
- Tropical monsoon climates have monthly mean temperatures above 18 °C in every month of the year and feature wet and dry seasons.
- The diurnal range of temperature of small.
- Locally, Orographic (Relief) uplift is an important mechanism for promoting precipitation. As air travels into the Indian subcontinent, it is uplifted by the Himalayas, causing cloud development and precipitation.

18. *The women's questions arose in modern India as a part of the 19th century social reform movement. What were the major issues and debates concerning women in that period?*

**Hints:**

During the British rule the spread of English education and Western liberal ideology among Indians and spread of Christianity and missionary activities, resulted in a number of movements for social change and religious reform in the nineteenth century.

The initiatives came largely from male reformers like Raja Ram Mohan Roy, Ishwarchandra Vidyasagar, M.G.Ranade, R.G. Bhandarkar etc. The new urban elite, drawn mostly from the upper castes, imbibed the enlightenment philosophy of individualism and humanism. They perceived barbaric traditional practices against women as a civilizational lapse and as recognizable social evils.

**Major issues:**

- Women education was denied,
- Widow remarriages were not allowed with presence of social stigmatization against widows,
- Sati was widely prevalent,
- no rights for women in inheritance
- social customs encouraged child marriages, polygamy etc.

**How the issues were dealt with:**

- A number of organizations notably the Brahmo Samaj, Arya Samaj, Theosophical Society, Prarthana Samaj were set up to deal with these issues.
- Laws like Bengal Regulation Act XXI termed female infanticide as a murder, Consummation of marriage age was increased to ten, then twelve and then to fourteen. Hindu Widow's Remarriage Act was passed in 1856. Abolition of Sati Act 1829 was passed.
- The chief instrument was formal education but the issue became inextricably linked with the gender segregation and seclusion (purdah) practiced by the upper castes and classes and, by extension, with a reworking of public-private gender roles.

There were also women's movement organized by white-collar middle-class women and social workers from upper class. Feminist publications such as Manushi, Mahila Andolan Patrika, Feminist Network were run by women to enlighten masses about women's rights.

19. *Distinguish between religiousness/religiosity and communalism giving an example of how the former has got transformed into the latter in independent Indian.*

**Hints:**

**Religiousness /religiosity:**

- The terms religiousness/religiosity are used interchangeably, but often defined as an individual's conviction, devotion, and veneration towards a divinity.
- However, in its most comprehensive use, religiosity can encapsulate all dimensions of religion.
- The concept can also be used in a narrow sense to denote an extreme view and over dedication to religious rituals and traditions. This rigid form of religiosity in essence is often viewed as a negative side of the religious experience and can be typified by an over involvement in religious practices which are deemed to be beyond the social norms of one's faith.

**Communalism:**

- The word 'communalism' refers to aggressive chauvinism based on religious identity. It is an attitude that sees one's own group as the only legitimate or worthy group, with other groups being seen as inferior, illegitimate and opposed.

- Communalism is also an aggressive political ideology linked to religion: One of the characteristic features of communalism is its claim that religious identity overrides everything else. Whether one is poor or rich, whatever one's occupation, caste or political beliefs, it is religion alone that counts.

#### **Differences:**

- Communalism is mainly a political ideology linked to religion whereas religiosity is about religion only.
- Rigid form of religiosity in essence is often viewed as a negative side of the religious experience but there is broader view which shows positive side too, but communalism has a strictly negative connotation.

#### **How religiosity got converted into communalism post-independence?**

- After independence, despite predominantly Hindu population, scars of partition especially in Northern states, consequences of divide and rule policy of British, political representatives taking advantage of these sensitive attitudes for vote banks converted the religiousness nature of people in to communalism and communal riots.
- With respect to the Ram Mandir issue believing in Ram and following his principles shows the religiousness of a person, but when the person believes that Ram mandir was where Babri Masjid was built and mosque has to be demolished leads to communalistic attitude.
- Similarly, Hindus consider cow as a holy animal which is religiousness but trying to punish and killing the people who make livelihood with the skin of this animal and taking law into own hands is communalistic tendencies.
- In the later part of post independent India, religiousness is relegated to backseat and communalism emerged as the main force for electoral gains across many States. Communalism thrives on frenzied emotions raked up by vested interests for immediate gains.

20. *"The growth of cities as I.T hubs has opened up new avenues of employment, but has also created new problems." Substantiate this statement with examples.*

#### **Hints:**

IT sector has been one of the most important sectors to help India achieve good growth and provide avenue for employment of rapidly growing engineering graduates every year.

#### **Advantages of this sector:**

- The industry continues to be a net employment generator making it a dominant player in the global outsourcing sector. NASSCOM has confirmed that the industry continues to be a net hirer and reports that 2.5-3 million new jobs will be created by 2025.
- Probably no sector is untouched by information technology. As a result, the I.T industry employs professionals from all other fields which could also be non- technical in nature.
- The rapid development of technologies such as networking, multimedia and the Internet have created totally new job categories where none existed a few years ago.

#### **Problems created by this sector are:**

- **Urbanization issue:**
  - Due to concentration of IT companies only in few cities, urban population swelled leading to endless traffic jams, over-crowded public transport, etc.
  - The cities are booming with malls, shops and offices of multinational companies, but completely lacks the infrastructure to support this growth.
  - Led to the compact growth at central core areas of cities and sprawl at outskirts which are deprived of basic amenities.

- Water crisis
- **Psychological issues:**
  - Extended work timings, competition and, most importantly, insecurity at work are contributing to an increase in people's stress levels.
  - People working as per client timing in foreign countries have disturbed life and sleeping patterns, and in many cases, have almost no family life.
- Neglect to all other traditional disciplines of education that stood as backbone of country's development.
- The applications of computers in many other fields like natural resource development, utilization of such resources for overall regional balanced growth, and many such developments never occurred in India because of excessive growth of IT.
- It is not able to create jobs proportionate to the graduating youth every year.
- **Migration:**
  - Similarly, this also lead to increase in migration with demand for domestic labour on rise.

However, these problems have been faced not just by the IT sector, but by all the high growth sectors of late and they have occurred due to improper urban planning rather than the sector itself.

There needs to a be transformation in urban governance by making India's municipal administrations politically strong also cities need to implement plans for service delivery, including routine maintenance to prevent the gradual degradation of assets. Similarly, We need to create planned cities with proper infrastructure and promote the growth of such sectors there. For example, the recent development of GIFT city for financial sector in Gujarat is on correct lines. We need more such specialized cities.

