**Q1.** To what extent has the urban planning and culture of the Indus Valley Civilization provided inputs to the present day urbanization? Discuss

Ans: Indus Valley Civilization (IVC) had made significant advances in civilization and urbanization compared to contemporary Sumerian and Mesopotamian civilizations. Few key features of IVC were

- i) Large areas of habitation of more than 100 hectares of each city
- ii) Sophisticated network of underground drainage
- iii) Presence of town centers with ritualistic central bath and habitation of noble in larger houses near to centre of town centers
- iv) Streets were wide and cut each other at 90 degrees gave grid layout a standard feature of modern civilization
- v) Presence of well in rich houses and common well for poorer people
- vi) Presence of granary inside city to store grains for usage
- vii) Presence of extensive trade as evidenced by ports and large number of habitations separated by distance

All these features made IVC precursor of modern civilization. It is said 19<sup>th</sup> century Paris and London had poorer drainage than IVC. Similar to modern cities rich lived in centre in large houses and towns had grid layout.

However all modern urban planning are independently developed and not taken indicators from IVC which was discovered in late 19<sup>th</sup> century only.

- **Q2.** Gandhara sculpture owed as much as to the Romans as to the Greeks. Explain. Ans: Gandhara sculpture developed under reign of Kushans and flourished as fusion between Greeks (yavans) and Indian art. However it owes its influence to both Romans and Greeks
- i) Romans were successor to Greeks and Indians traded with Romans extensively according to record of Pliny elder resulting in influence in sculpture and cultural life
  Indian kings sent ambassadors to the court of Roman Kings
- ii) Depiction of human form of Buddha developed in Gandhara from earlier symbolic representation by empty throne, wheel etc
- iii) Cloth of human sculpture were worn by Romans toga a loosely worn piece of cloth
- iv) Depiction of beautiful human forms from Greek influence
- v) Bactrian Kings issued first and largest number of coins which in observe had Roman gods like Hermes depicted
- vi) Depiction of animals and fantastic creature from Roman and Greek myths like Half man half serpent, Griffin

In these ways both Romans and Greeks were responsible for influencing Gandhara art

**Q3.** Taxila university was one of the oldest university of the world....

Ans: Didn't attempt

**Q4.** The third battle of Panipat was fought in 1761. Why were so many empire-shaking battles fought in Panipat.

Ans: Third battle of Panipat was fought between British and Maratha in 1761 which resulted in defeat of Maratha and their subsequent decline as power in India. Panipat is close to Delhi and Delhi has been capital of India since medieval times. Hence to capture India one had to capture Delhi. Since ancient times India is protected in south by virtue of being peninsula separated by long distances in sea and was unchallenged till arrival of British here. In north Himalayas made any attempt to attack difficult. Hence all forces took route of Qandhar to attack India.

Delhi being capital was natural place to attack or to control to rule India. Hence Panipat which is close to Delhi saw many battles to control it when invaders were not stopped at frontiers or managed to overwhelm frontier forces. Thus Battle of Panipat was always between stron challenger and weak King, which resulted in more than often change of hands in empire.

## Three Battles of Panipat

- 1<sup>st</sup> battle was fought between Babur and Ibrahim Lodi, Babur managed to defeat Lodi and establish Mughal dynasty in india,
- 2<sup>nd</sup> Battle between Akbar and Hemu was fight for supremacy in India between Mughals and Afghan warlords led by Hemu. Defeat of hemu led to consolidation of Mughals in India.
- 3<sup>rd</sup> battle of Panipat was fought between Anglo-Marathas. By winning in 1761 British sealed the fate of Marathas and established themselves as paramount power in India leading to colonization of India.
- **Q5.** Sufis and medieval mystic saints failed to modify either the religious ideas and practices or the outward structure of Hindu/Muslim societies to any appreciable extent. Comment

Ans. Sufism rose in Middle East in 8<sup>th</sup> century as mystical sect, it propounded direct communion with god through mystical practices and devotion. This led to alienation between Ulemas and Sufi saints in middle east which led them to be looked down upon and didn't had much impact in Arabia.

However in India Sufi's managed to have significant impact because

i) Sufi saints believed in direct communion with Gods which was in consonance with Bhakti saints this contributed to their philosophy in India

- ii) Some Sufis Saint like Chistis had state patronage by Mughals which led them to have disproportionate influence in social and cultural life
- iii) Sufis saints interacted with nirpanthi Yogi and adopted their breathcontrolling and other yogic exercises which led to further acceptance of Sufism in hindu masses
- iv) Sufi saints lived austere lives with compassion for masses regardless of their religion this led many sufi saints to have large followings in Hindus and Muslims

Even Today many sufi saint mausoleum are considered as holy site by both Hindu and Muslim – e.g: Chisti and Hazrat Nizaamudin mausoleums in Ajmer and New Delhi respectively. India islam is influenced by Sufism giving it unique pluralist character which is missing in Arabian islam. Hence sufi saints were able to modify religious ideas and outward structure of Hindu/Muslim socities in India.

**Q6.** Examine critically the various facets of economic policies of the British in India from mid-eighteenth century till independence.

Ans: Economic colonialism was non sine qua of British impearlism of India. It evolved from 18<sup>th</sup> century mercantilism to laissez faire however the impact of this were devastating on Indian economy.

## 1757 to 1857: Mercantilism

- Initially British were importing Indian goods like textiles from India this led to drain of British gold leading to institution of strict import tariffs on Indian goods
- British won dewani rights from Nawab Sirajudullah which enabled them to pay for their imports from India – thus draining Indian economy
- Permanent settlement destroyed agrarian structure of India by monetizing agriculture and high fixing of land revenues caused distress in peasants
- Industrial revolution enabled British to dump their goods in India tax free and imported raw materials at high import tariff thus this mercantilist policy impoverished Indian industry
- Indian artisans were unemployed due to biased policy of British increasing distress
- EIC had exclusive monopolist trade relation with India till 1813, it extracted special privileges for its merchants in form of Tax exemption and other privileges – this was widely misused by EIC merchants driving native merchants to bankruptcy

## 1857-1947: Mercantilism replaced by laissez-faire

- Free trade under laissez-faire didn't lead to any improvement as India had minuscule industrial base and was dependent on imports from Britain
- Massive outgo in terms of payments to civil servants, pensions to retired personnel in Britain and home charges drained Indian economy.

- High expense in maintaining Indian army which was used to maintain and further British impearlism in India and abroad
- Later in 19<sup>th</sup> century little Indian industrial base was discriminated against by British financial institution for credit led to their depression
- Spread of railways and telegraph took modern economic system to hinterlands leading to increase in exploitation

India which was one of the highest economic productivity in the world till 18<sup>th</sup> century was systematically impoverished and reduced to abject poverty by British economic policy by independence.

**Q7.** In What ways did the naval mutiny prove to be the last nail in the coffin of British colonial aspirations in India

Royal Indian Navy (RIN) mutinied in 1946 protesting against British officials on some minor matters. The mutiny spread quickly among warships of RIN and acted as final nail in coffin of British colonialism in India.

- Due to Quit India campaign the masses had been excitable and radicalized, massive demonstration against British were common
- World War II had significantly weakened Britain and resulted in emergence of US and USSR as superpower who were against impearlism and colonialism
- Civil administration which was steel frame of British impearlism was discouraged by congress ministries and remained neutral rather than active participant of impearlism
- Indian army was bastion of British impearlism which was made disproportionately strong to maintain law and order situation in India, however with RIN mutiny this confidence was eroded. Moreover British were scarred by memory of 1857 mutiny which was led by sepoys.

Labour govt realized that days of Indian impearlism was over and after RIN mutiny decided to have honorable and friendly exit and sent cabinet mission to discuss the terms of power transfer.

**Q8.** What were the major political, economic and social developments in the world which motivated the anti-colonial struggle in India

Indian nationalist struggle while being primarily domestic in nature but was influenced by major social and economic developments around the world

i) Scientific revolution in Europe resulted in idea of nation-state, constitutionalism, separation of power and social contracts etc by thinkers like Locke, Montesquieu,

- Rousseau etc. This scientific revolution in turn influenced Indian nationalist who were created due to introduction of modern education by British
- ii) Irish struggle against British colonialism inspired Indian nationalists in equal measure and fostered solidarity due to common enemy
- iii) Industrial revolution gave rise to ideas of socialism and communism which in turn influenced revolutionary terrorist like Bhagat Singh and nationalist leaders like Bose and Nehru. Success of Russian revolution and ensuing fast progress also influenced nationalist leaders like Nehru
- iv) Dominion status of Canada and Australia inspired early moderate nationalist to aim for the same self-ruling status through continuous gradual reforms. And later by refusal by British to grant the same lead to rise of extremist and finally call for complete independence.
- v) WWI and WWII
  - World War I helped creation of first mass movement of India in form of Non cooperation movement along with Khilafat movement. WWI also helped in creating internationalist Ghadar movement due to massive misery brought about by war in form of inflation and high mortality of Indian soldiers.
  - WWII resulted in weakening of Britain and rise of US and USSR as superpower and subsequent weakening of impearlism. Disaffection from war misery and inflation also radicalized masses against British

**Q9.** What were the events that led to the Suez Crisis in 1956? How did it deal a final blow to Britain's self image as a world power?

Ans: Suez Canal was one of the strategic water routes which reduced distance between Europe and Asia significantly. Suez crisis was perpetuated by coup by Nasseer against western backed emperor and then nationalization of canal in 1955. Britain had earlier bought majority share in Suez Canal under PM Disreli, PM Baldwin of Britain allied with France and declared war against Egypt to capture Suez canal. Both France and Britain at that time held colonial position in Asia, like France controlled Indo-China and for strategic purposes considered control of Suez Canal vital.

This proved to be strategic blunder as entire world saw it as continuance was old arrogant colonial attitude. With WWII Britain and France had significantly weakened and US and USSR had emerged as superpower. This unilateral action by Britain and France was severely condemned internationally and even ally of Britain rebuking their action. Due to international pressure Britain and France were forced to withdraw.

This withdrawal without gaining anything in favourable terms dealt a death blow to image of Britain as superpower and ultimately led to gradual weathering of its colonial empire.

**Q10.** The New Economic Policy – 1921 of Lenin had influenced the policies adopted by India soon after independence. Evaluate

Ans: Lenin formulated NEP in 1921 to address the problems which arose due to rapid communism advent and failure of collective farming

- i) Peasants were allowed to keep surplus and only pay fixed rate of tax to govt. this led to quick growth in agricultural productivity
- ii) Institution of fiver year plans to pursue planned development of economy under Gosplan led to fast industrial growth especially in mining and iron and steel industries
- iii) State led heavy industries establishment alongwith permission for smaller private sector initiatives in industries
- iv) Massive investment in education in primary and university level to create enlightened and educated cadre for quick industrialization USSR literacy rate increased significantly and quickly

India adopted Russian style of economic planning by institution of Planning commission soon after independence. State led industrialization was also adopted giving rise to mixed regulated industries. India invested in agriculture like USSR by creation of massive public work project like large dams to increase agricultural productivity. India created colleges and universities to train professionals however its effort in primary sector was limited compared to USSR leading to slow rise in literacy.

**Q11.** How does Patriarchy impact the position of a middle class working woman in India

Ans: According to latest 69<sup>th</sup> round of survey by NSSO the number of working women has declined in India. Another study by WEF puts India at lowly position of 142 in gender equality with extremely poor rankings in gender specific healthcare where India is among lowest in the world.

This studies underscore that the by expanding economy the participation rate of women has gone down, more than 100m out approx 400m workers are women but 96% of them are employed in unorganized sector which has lower economic productivity and lower or no welfare protection.

Patriarchy affects status of working women as

- i) Withdrawal of women from workforce with increasing economic affluence as they are expected to carry the burden of honour of caste and community
- ii) Patriarchy prevents adequate healthcare facilities to be provided to women resulting in general lower health indicator

- iii) Some scholars have contended that withdrawal of women from workforce is due to greater participation in higher education, but this is not supported by empirical evidence
- iv) Patriarchy also makes family spend on education of male child compared to female resulting lower economic productivity of female
- v) Females generally employed in textile factories were limited by Factory law that prevented night shifts this law is driven patriarchal concerns

Women should be encouraged to participate as it lowers economic output, lowers their status and confidence and if achieved would ensure faster inclusive growth.

**Q12.** Why do some of the most prosperous regions of India have an adverse sex ratio for women? Give your arguments.

According to latest census of 2011, gender ratio in India decline precipitously to 911 to 1000 boys. This gender ration has worsened in states like Haryana Punjab, Delhi which are prosperous states of India in terms of per capita income and GDP. Many reasons among such adverse is ratio is

- i) Patriarchal attitude of states favour male child who carry family name
- Modern family norms dictate smaller families and here male child are preferred
- iii) Lax implementation and prosecution under PC&PNDT act 1993 which disallowed sex determination tests has encouraged female foeticide
- iv)Social problems of Dowry which makes family see girls as burden persists in country and thi leads to female foeticide or lack of good care of female child

These reasons are behind precipitous decline of gender ration with worsening of gender ration in 0-6 years old according to 2011 census.

**Q13.** The life cycle of a joint famly depends on economic factors rather than social values. Discuss

In India joint family has always been minority and driven by economic factors rather than social values as some thoughts persists. Nuclear family has prospered in India in recent years in place of joint families due to monetization of relations, moving away from jointly held factors of production like agricultural land.

Earlier economic reasons of holding joint family professions ensured by stratified caste system ensured joint families to take advantage- like Zamindars family were joint to use agricultural land jointly. Similarly business families of bankers were made of familial relations.

With monetization of relations except closest ones and agrarian structure after British colonialism traditional social structure like jajmani system broke down. Thus this break of social structure and advent of modern civilization where factors of production is education has resulted in proliferation of nuclear family.

However there are many new interesting trends evident like creation of large trust network based on community – like Marwari community does business with each other on basis of trust. Hence joint family has modified in modern Indian society.

**Q14.** Discuss the various economic and socio-cultural forces that are driving increasing feminization of agriculture in India

Ans: According to latest agricultural census of 2005-06 the percentage of female farmers has increased to 11.2% of all farmers. This increase in feminization of Indian agriculture is driven by following factors:

- i) Increased land fragmentation has made subsistence agriculture practice difficult hence it has driven migration among male and made women work farms
- ii) Migration of men to urban area to earn more especially by employment in construction sector
- iii) Distress led feminization of agriculture as in many areas male of family committed suicide due to distress and responsibility of earning livelihood fell on Female
- iv) Migration of labours has made it imperative from female to work in fields
- v) Loosening patriarchy attitude has also accepted greater female participation in fields

This feminization needs to be supported by proper govt policy to ensure higher agricultural productivity and ensure dignified living through agriculture.

Q15. How do Indian debates on secularism differ from the debates in the West.

Indian constitution makers kept secularism of India at higher ideal of fraternity and positive discrimination of religion to effect social reforms in religion in return of recognition. While in west the secularism has led to separation of church and state and adoption of indifferent attitude towards each other with mutually exclusive areas of operation.

Indian constitution positive identification of secularism gives right of freedom to worship (art 15), right to protect minority religion, linguistic or cultural heritage (Art 29) as fundamental rights. Moreover state gives support in establishment of minority institution which is used to protect and propagate their identity.

In bid to affect social reforms in religions like banning of untouchability, opening all temple for scheduled castes and tribes as part of continuing social reforms of nationalist struggle in India was continued. Moreover civil code to regulate Hinduism, Jainism, Sikhism and Christanity was formulated. However to bring about social reforms and undo historical injustice reservations were allowed in govt jobs, legislature and educational institutions for scheduled castes, scheduled tribes and other backward castes not withstanding Article 16.

Thus through positive discrimination of religion and bid to affect social reforms in traditional Indian society makes Indian secularism a higher model than that of western secularism.

**Q16.** Most of the unusual climatic happenings are explained as an outcome of the El-Nino effect. Do You agree.

Agreed with the statement that unusual climatic happenings being explained by El-Nino largely.

El-Nino is warming of Pacific ocean current and its replacement of cold Peruvian current. This is measured by warming of Pacific waters above 27 C. Warming of middle pacific water is known as El-Nino Modoki. Both of these phenomenon occur generally at interval of 7-8 years and are associated with unusual climatic happening around the world.

## El Nino causes following effects

- i) Disrupts Walker circulation hence having weakening effect on Indian Monsoons economic impact on Indian agriculture is severe and in turn to global agricultural market as India is large agricultural producer
- ii) Warmer water around Peru causes fishing stocks to collapse
- iii) Higher rains and floods in South America Chile etc.
- iv) Draughts in Australia
- v) Interference in Madden Julian Oscillation

El-Nino Modoki is recently discovered phenomenon whose affect is still uncertain on weather patterns around the world, however it probably causes higher cyclonic activity in Arabian Sea.

**Q17.** Why are the world's fold mountain systems located along the margins of continents? Bring out the association between the global distribution of fold mountains and the earthquakes and volcanoes.

Fold Mountains are formed due to converging tectonic plates. Where tectonic converge one plate subsides and other plate folds up forming fold mountains. Generally fold mountains are formed at continental margins as continental margins are marked by tectonic plate boundaries and when it collides with other plates lead to rise of fold mountains.

Drew simple diagram of fold mountain as converging of two tectonic plates

Since Fold Mountains and volcanoes are located near boundaries of tectonic plates, there are numerous collisions, slippage or moving away from each other giving rise to fold mountains and rift valleys etc. Volcanoes are generally formed due to moving away of Tectonic plates forming rift zones exposing asthenosphere. Most of earth quakes are caused by collision between tectonic plates when one subsides within other, or slip past each other. Violent volcanic eruptions also cause magma to come up causing earthquakes. Example earthquake are common in Ring of fire where Pacific plate collides with other major or minor plates, in Himalayan region, in tri-junction area like Japan.

**Q18.** Explain the formation of thousands of islands in Indonesian and Philippines archipelagos

Had no idea about this. Wrote three points

- Presence of guyots due to ridge mountains
- Above the sea Ridge mountains formed due tectonic plate collisions
- Coral reefs forming many small islands

**Q19.** Tropical Cyclones are largely confined to South China Sea, Bay of Bengal and Gulf of Mexico. Why?

Tropical cyclones need many factors for development which are present in abundance in these three areas.

- i) Presence of low pressure due to thermal heating all three places are near to ITCZ receiving good amount of heat
- ii) Differential heating of land and Sea all three area have land nearby giving rise to differential heating
- iii) Coriolis force is high
- iv) Upper winds disappearance like jet stream over India is replaced during Monsoons which aid cyclone formation in Bay of Bengal

v) Frictional force between air and sea high in tropical area

Cyclone formation in Bay of Bengal is also aided by disruption of Walker circulation when It ascends from Bay due to El-Nino effect. El-Nino Modoki also increases cyclonic behavior. Thus due to these reasons cyclone formation is high in these three seas.

**Q20.** Bring out the relationship between the shrinking Himalyan Glaciers and the symptoms of climate change in the Indian sub-continent.

An earlier discredited study by TERI claimed that Himalyan glaciers would disappear by 2050 fast however recent studies point to global warming of Tibetan plateau which has thousands of glaciers which feed perennial rivers of northern India are shrinking. This would cause significant impact in South Asia dependent on these rivers.

Increasing GHG emission is fueling vicious circle of shrinkage of Himalyan glaciers and Tibetan glaciers. Tibetan plateau is called third pole of world, and its heating would affect Indian Monsoons bue to affect on jet streams and reversal of trade winds (monsoons). Shrinkage of glaciers raise albedo which in turn cause more insolation to be absorbed which causes more glaciers shrinkage.

This glacier shrinkage would cause medium term river flow to increase but reduce long term river flow disproportionately affecting Indian agriculture which depends upon rains and rivers for irrigation. Climate change is also causing increasing climate variability like increased rainfall at end of monsoons, weakened western disturbance which cause snowfall in Himalayas in winter replenishing glaciers. India needs strategy to deal with climate change in form of adaptation to secure agriculture production.

**Q21.** Whereas the British planters had developed tea gardens all along the Shivaliks and Lesser Himalayas from Assam to Himachal Pradesh, in effect they did not succeed beyond the Darjeeling area. Explain.

British took tea from China and to supplant their import dependence on China tried tea plantation in hilly terrain of India with equivalent climate. Thus plantations were made all along Shivaliks. Favourable conditions for tea in Darjeeling are

- i) Cool climate
- ii) Deep clayey soil permitting terrace farming
- iii) Year round rains
- iv) Low gradient
- v) Presence of cheap labour through bonded labours permitted by Plantation act which brought labours to work on plantations from Bihar and Bengal

While cool climate and low gradient were available in Shivaliks also but absence of deep clayey soil and year round rains which are essential for tea led plantations established in these are not succeed.

**Q22.** Why did the Green Revolution in India virtually by-pass the eastern region despite fertile soil and good availability of water?

Green Revolution is adoption of modern agricultural techniques like HYV seeds, chemical fertilizers, pesticides with assured irrigation which led it to succeed in area where big farmers where able to adopt it due to higher resources and govt. support. Green revolution also requires extensive govt. support in form of irrigation projects, ICAR training and infra for HYV seeds for it to succeed all these were missing in Eastern India. Other reasons are

- i) Smaller land holdings
- ii) Practice of subsistence and intensive agriculture
- iii) Lack of assured irrigation projects in forms of canals and most of agri in area depend on rains
- iv) Lack of state govt initiative as agri is state subject
- v) Wrote one more cannot remember now

Faulty procurement policy of FCI under which higher remuneration provided to unsustainable farming in Punjab and Haryana, stagnation in output and worsening of regional inequality led to under RKVY govt of India instituted BGREI program in 2010 to extend Green Revolution technique to eastern India. This has resulted in good agri productivity and raising nation's agri output in last few years which has led to increase in allotment to 1000 cr in FY2013-14.

**Q23.** Account for the change in the spatial pattern of the Iron and Steel industry in the world.

Ans: Iron and Steel industry is mother industry of industrialization hence its spatial pattern in world is dependent on many factors like

- i) Presence of raw materials like iron ore, coking coal and water
- ii) Large market
- iii) Economies of scale

Iron and Steel industry due to massive need of raw materials was initially established near the raw materials source. Like establishment of Steel plant in Jamshedpur in Bihar or in Bhilai by SAIL. However steel is important industry for industrialization of country hence it was developed by countries around the world

regardless of presence of raw materials and was protected by tariff barriers. For example Japan developed large steel industry by depending completely on imports.

In recent times with advent of WTO the tariff barriers were done away with which led to expansion of steel industry in China where it is aided by presence of large market and economies of scale which makes production cheap. This cheap production and imports closed iron and steel industry of US.

There is also effect of cheap transportation which has aided set up of iron and steel plants near coasts. For example Steel plant in Vishakhapatnam by SAIL was developed to take advantage of shipping of coking coal through imports as India is short of it.

**Q24.** Critically evaluate the various resources of the oceans which can be harnessed to meet the resource crisis in the world

Ocean have emerged as next big thing in exploitation of resources. Few resources which can be harnessed to tide over resource crisis in the world are

- i) Manganese nodules found at the sea floor which can be used for extraction of useful minerals
- ii) Smokers or thermal vents at sea floor can be used to harness important mineral like Sulphur
- iii) Deep sea E&P for hydrocarbon resources
- iv) Deep sea fishing to aid fishing industry
- v) Wave and tidal energy through technology to generate power

However these resource exploitation is full of risk, mg nodules extraction from sea floor is very damging to the sea floor and unique ecosystem developed at the sea floor. Moreover on board basic refining of nodules would pollute sea and effect marine life. Smokers support unique ecosystem, disturbing them would lead to collapse of this ecosystem. Deep sea E&P activities are fraught with risk of oil spill.

UN has formed international body to regulate international sea mining activities however the practice needs through sustainability study to be viable ecologically.

**Q25.** How does India sees its place in the economic space of rising natural resource rich Africa?

India has formed numerous multilateral initiatives like Team-9, development of pan-Africa e-network to support initiative like e-medicine, education etc. These initiatives are commercial initiatives being pursued with larger African countries like SA, Nigeria, Kenya etc. Biggest initiative of India is India-Africa initiative of which third edition to be held in 2015 will see participation by all AU leaders rather than limited participation in earlier summits under Banjul formula. Under last two summits India agreed to extend developmental aid and export credit of \$1 bn to finance export from India.

India is competing with China, US and EU for natural resources in Africa. India for its energy security has formed bilateral relationship with Mozambique and Nigeria for E&P. Recently ONGC discovered gas in Mozambique.

India is concentrating on soft power and its diasporas to extend its influence and foster warmer ties with African nations. India is also encouraging its private sector to explore economic opportunity in Africa, which sees it as continent of opportunity. Airtel invested in telecom sector of Africa, many Indian companies bough agri land in Ethiopia for export led agri.

India and Africa need trade driven development which can increase mutual economic prosperity.