

1. **Ans: d**

The chairperson of panchayats at the intermediate and district levels shall be elected indirectly by and from amongst the elected members thereof. However, the chairperson of a panchayat at the village level shall be elected in such manner as the state legislature determines.

Chairperson at the intermediate and district level must necessarily be a member.

2. **Ans: c**

The Parliament can make laws on any subject of the three lists (including the State List) for the union territories. This power of Parliament also extends to Puducherry and Delhi, which have their own local legislatures.

The legislative assembly of Delhi can't make laws on **public order, police and land**.

A regulation made by the President has the same force and effect as an act of Parliament and can also repeal or amend any act of Parliament in relation to these union territories. In the case of Puducherry, the President can legislate by making regulations but only when the assembly is suspended or dissolved.

3. **Ans: b**

While these areas are autonomous, they fall under the executive power of the government.

The district and regional councils can make laws on certain specified matters like land, forests, canal water, shifting cultivation, village administration, inheritance of property, marriage and divorce, social customs and so on. But all such laws require the assent of the governor.

The district and regional councils within their territorial jurisdictions can constitute **village councils or courts** for trial of suits and cases between the tribes. They hear appeals from them. The councils can adjudicate on **minor civil and criminal** disputes.

4. **Ans: c**

Reservations for OBCs fall under the voluntary provisions.

Compulsory Provisions

1. Organisation of Gram Sabha in a village or group of villages.
2. Establishment of panchayats at the village, intermediate and district levels.
3. Direct elections to all seats in panchayats at the village, intermediate and district levels.
4. Indirect elections to the post of chairperson of panchayats at the intermediate and district levels.
5. 21 years to be the minimum age for contesting elections to panchayats.
6. Reservation of seats (both members and chairpersons) for SCs and STs in panchayats at all the three levels.
7. Reservation of one-third seats (both members and chairpersons) for women in panchayats at all the three levels.
8. Fixing tenure of five years for panchayats at all levels and holding fresh elections within six months in the event of supersession of any panchayat.
9. Establishment of a State Election Commission for conducting elections to the panchayats.
10. Constitution of a State Finance Commission after every five years to review the financial position of the panchayats.

5. **Ans: d**

In January 1957, the Government of India appointed the committee to examine the working of the Community Development Programme (1952).

The committee submitted its report in November 1957 and recommended the establishment of the scheme of ‘**democratic decentralisation**’, which ultimately came to be known as Panchayati Raj.

6. **Ans: a**

A cantonment board is established for municipal administration for civilian population in the cantonment area. It is set up under the provisions of the **Cantonments Act of 2006**—a legislation enacted by the Central government. Thus a statutory body, unlike the other types of urban local bodies, which are created and administered by the state government, a cantonment board is created as well as administered by the Central government.(note that a **port trust** is also created by an Act of Parliament.)

7. **Ans: c**

The act does not apply to the states of **Jammu and Kashmir, Nagaland, Meghalaya and Mizoram** and **certain other areas**. These areas include

- (a) The **scheduled areas and the tribal areas** in the states;
- (b) The **hill area of Manipur** for which a district council exists; and
- (c) **Darjeeling district of West Bengal** for which Darjeeling Gorkha Hill Council exists.

However, the Parliament may extend the provisions of this Part to the **Scheduled areas** subject to such exceptions and modifications as it may specify. Under this provision, the Parliament has enacted the Provisions of the **Panchayats (Extension to the Scheduled Areas) Act 1996 (PESA)**.

8. **Ans: b**

The district and regional councils are empowered to assess and collect land revenue and to impose certain specified taxes.

Each autonomous district has a district council consisting of 30 members, of whom four are nominated by the governor and the remaining 26 are elected on the basis of adult franchise. The elected members hold office for a term of five years (unless the council is dissolved earlier) and nominated members hold office during the pleasure of the governor.

9. **Ans: a**

The act has given a practical shape to **Article 40** of the Constitution which says that, “The State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self -government.”

The president of India may direct that the provisions of this act shall apply to any union territory subject to such exceptions and modifications as he may specify.

10. **Ans: b**

Town Area Committee is created by a separate act of a **state legislature** (not by parliament).

11. **Ans: c**

The objectives of the PESA Act are as follows:

1. To extend the provisions of Part IX of the Constitution relating to the panchayats to the scheduled areas with certain modifications.
2. To provide self-rule for the bulk of the tribal population.
3. To have village governance with participatory democracy and to make the gram sabha a nucleus of all activities.
4. To evolve a suitable administrative framework consistent with traditional practices.
5. To safeguard and to preserve the traditions and customs of tribal communities.

6. To empower panchayats at the appropriate levels with specific powers conducive to tribal requirements.
7. To prevent panchayats at the higher level from assuming the powers and authority of panchayats at the lower level of the gram sabha.

12. **Ans: c**

13. **Ans: d**

The gram sabha have

- i) the power to enforce prohibition or to regulate or restrict the sale and consumption of any
- ii) the ownership of minor forest produce
- iii) the power to prevent alienation of land in the Scheduled Areas and to take appropriate action to restore any unlawfully alienated land of a Scheduled Tribe
- iv) the power to manage village markets
- v) the power to exercise control over money lending to the Scheduled Tribes
- vi) the power to exercise control over institutions and functionaries in all social sectors
- vii) the power to control local plans and resources for such plans including tribal sub-plans
- viii) The Gram Sabha or the Panchayats at the appropriate level shall be consulted before making the acquisition of land in the Scheduled Areas for development projects and before resettling or rehabilitating persons affected by such projects in the Scheduled Areas.
- ix) Planning and management of minor water bodies in the Scheduled Areas shall be entrusted to Panchayats at the appropriate level.
- x) The recommendations of the Gram Sabha or the Panchayats at the appropriate level shall be mandatory for grant of prospecting licence or mining lease for minor minerals in the Scheduled Areas.
- xi) The prior recommendation of the Gram Sabha or the Panchayats at the appropriate level shall be mandatory for grant of concession for the exploitation of minor minerals by auction.

14. **Ans: a**

74th amendment act of 1992 has added a new Part IX-A to the Constitution of India. It is entitled 'The Municipalities' and consists of provisions from Articles 243-P to 243-ZG. The act provides for the constitution of the following three types of municipalities in every state.

1. **A nagar panchayat** (by whatever name called) for a transitional area, that is, an area in transition from a rural area to an urban area.
2. **A municipal council** for a smaller urban area.
3. **A municipal corporation** for a larger urban area.

15. **Ans: b**

Even though all the union territories belong to one category, there is no uniformity in their administrative system.

An administrator of a union territory is an agent of the President and not head of state like a governor.

The President can also appoint the governor of a state as the administrator of an adjoining union territory. In that capacity, the governor is to act independently of his council of ministers.

16. **Ans: a**

Gharia (Fish-eating, Long-nosed crocodiles) once thrived in all the major river systems of the Indian Subcontinent. Today, they are extinct in the Indus River, in the Brahmaputra of Bhutan and Bangladesh, and in the Irrawaddy River. Their distribution is now limited to only 2% of their former range.

Gharia do not kill and eat humans. Jewellery found in their stomachs may have been the reason for the myth that gharia are man-eaters. They may have swallowed this jewellery as gastroliths used to aid digestion or buoyancy management.

As the population has declined drastically in the past 70 years, the gharia is listed as Critically Endangered by the IUCN.

17. **Ans: c**

Smog, itself, is the pollutants given off by burning fossil fuels. Photochemical smog is a type of secondary pollutant that occurs when the chemicals given off react with sunlight in the atmosphere.

Photochemical smog is produced when pollutants from the combustion of fossil fuels react with sunlight. The energy in the sunlight converts the pollutants into other toxic chemicals. In order for photochemical smog to form, there must be other pollutants in the air, specifically nitrous oxides and other volatile organic compounds (VOCs).

18. **Ans: c**

Seaweeds only grow in coastal shallow water where ever sizeable substrata is available.

Two specific environmental requirements dominate seaweed ecology. These are the presence of seawater (or at least brackish water) and the presence of light sufficient to drive photosynthesis.

Another common requirement is a firm attachment point, although some genera such as Sargassum and Gracilaria have species that float freely. As a result, seaweed most commonly inhabit the part of a sea that is close to the shore (the littoral zone) and within that zone more frequently on rocky shores than on sand or shingle.

19. **Ans: b**

National park enjoys greater protection than sanctuary. Grazing of livestock is totally prohibited in National park, which is regulated in sanctuary.

20. **Ans: b**

Buxa tiger reserve is in West Bengal and it is getting affected due to increased dolomite mining in the area.

21. **Ans: a**

E-8 countries are India, Botswana, The Republic of Congo, Indonesia, Kenya, Srilanka, Tanzania and Thailand. E-8 was first held in 2011 and later at Delhi in May 2014. Reaching out to the people, to improve conservation and welfare prospects of the elephant - India's National Heritage Animal, the Ministry of Environment and Forests (MoEF) in partnership with the Wildlife Trust of India (WTI) has launched the nationwide Haathi Mere Saathi campaign in 2011.

22. **Ans: b**

Both industrial smog and photochemical smog are forms of air pollution. Both smog require an atmospheric inversion layer to occur. Although both appear to the eye as yellow-brown haze, they differ in two key ways: chemistry and composition.

Industrial smog typically exists in urban areas where factories burn fossil fuels such as coal, which creates smoke and sulfur dioxide that mix with fog droplets to create a thick blanket of haze close to the ground.

Photochemical smog occurs in drier, sunny areas and forms because of increased usage of all fossil fuels, including gasoline, and the burning of trees and organic waste.

Photochemical smog is a mixture of pollutants that form when nitrogen oxides and volatile organic compounds react to sunlight, creating a haze that is common over cities.

The two major primary pollutants, **nitrogen oxides and VOCs**, combine in a series of chemical reactions to create secondary pollutants, which are dangerous when detected in our atmosphere and at ground level.

The two most dominant toxic components produced in photochemical smog are **ozone and peroxyacetyl nitrate**.

Industrial smog contains two primary components: **sulfur dioxide and particulates**, which include dust and soot from burning coal for heat and fuel.

23. **Ans: c**

The primary pollutants are **“directly” emitted from the processes** such as fossil fuel consumption, Volcanic eruption and factories. The major primary pollutants are Oxides of Sulphur, Oxides of Nitrogen, Oxides of Carbon, Particulate Matter, Methane, Ammonia, VOC, Chlorofluorocarbons, Toxic metals etc.

The secondary pollutants are **not emitted directly**. The secondary pollutants form when the primary pollutants react with themselves or other components of the atmosphere. Most important secondary level Air Pollutants are Ground Level Ozone, Smog, PAN etc.

24. **Ans: d**

Soil erosion is the loosening and displacement of topsoil particles from the land. Soil erosion is a natural process that occurs on all lands. Soil erosion may occur at a slow or fast rate. Land degradation is the deterioration in the quality of land. Degradation of land results in loss of crop production capacity of the land.

25. **Ans: a**

2nd statement is wrong because a gaseous cycle can have both atmosphere and/or hydrosphere as a reservoir. (eg: water cycle).

26. **Ans: d**

Direct question, can be answered using basic knowledge.

27. **Ans: b**

BOD measure of oxygen equivalent of the requirement of oxidation of **only biodegradable materials**. Chemical Oxygen Demand measures both. Higher BOD ----> lower dissolved oxygen content in water, therefore is highly polluted.

28. **Ans: d**

Ocean acidification, smog pollution, ozone depletion as well as changes to plant growth and nutrition levels can be caused by greenhouse gas.

29. **Ans: a**

30. **Ans: c**

Isolated food chains decreases the stability of an ecosystem because in an unfortunate event of one of the links facing extinction, it affects stability of entire ecosystem

31. **Ans: b**

Acidification of soils results in release of heavy metals like Cu, Zn, Cd and Hg in the soil. These metals leach down to ground water and/or are washed down to rivers and lakes. The terrestrial plants absorb these metals from soil and aquatic plants from water. These metals thus enter the natural food chain and are passed on successively to higher trophic levels ultimately reaching human beings as plant or animal food.

As a result of acid rain, the concentration of bacteria in soil gets reduced leading to reduction in decomposition rate.

32. **Ans: c**

Estuary is the meeting place of river and ocean water and the region is highly productive.

33. **Ans: d**

All the substances mentioned in the options do cause air pollution of the atmosphere

34. **Ans: d**

Nitrogen compounds can produce all the effects

35. **Ans: d**

There are both natural and human sources of methane emissions.

The main natural sources include wetlands, termites and the oceans. Natural sources create 36% of methane emissions.

Human sources include landfills and livestock farming. But the most important source being the production, transportation and use of fossil fuels. Human-related sources create the majority of methane emissions, accounting for 64% of the total.

Oceans, Rivers and Estuaries, Wetlands, Termites. Methane is produced by the breakdown or decay of organic material and can be introduced into the atmosphere by either natural processes – such as the decay of plant material in wetlands, the seepage of gas from underground deposits or the digestion of food by cattle – or human activities – such as oil and gas production, rice farming or waste management.

36. **Ans: c**

Refer world map.

37. **Ans: a**

Planning Commission was abolished in 2014 and thereby the relevance of five year plans ended.

Thereafter the Prime Minister Office advised NITI Aayog to prepare a National Development Agenda comprising of Fifteen Year Vision, Seven Year Strategy and Three Year Action Agenda.

Chairman of NITI Aayog is Prime minister always, the vice-chairman is Rajiv Kumar.

38. **Ans: c**

It was enacted to prevent the infliction of unnecessary pain or suffering on animals.

It extends to whole of India except J&K.

Animal welfare board of India in MoEF, was established under this act. It regulates animal markets, dog breeders, aquarium and pet fish shop owners. Rukmini Devi Arundale was the founder chairperson of AWBI.

Treating animals cruelly under this act, includes:- Inflicting pain through beating etc., willfully and unreasonably administering drugs, caging, conveying and carrying animals inappropriately as to cause pain & suffering to them, mutilating any animals etc.

39. **Ans: a**

BTIA discussions are under trouble due to lack of consensus on tariffs of some commodities, like automobiles, wine etc.

40. **Ans: b**

First South Asian satellite (GSAT-9), funded entirely by India, has been launched recently by ISRO.

With this, India has placed itself uniquely in space diplomacy by giving a boost to neighborhood first policy. It is 2,230kg geosynchronous communications and meteorology satellite, launched as a

gift for South Asian countries. Its benefits include mapping natural resources, telemedicine, IT connectivity, DTH connectivity, more predictable weather forecasting and quick response to natural disasters. All the SAARC countries excluding Pakistan are part of this project. Thus it is named as South Asia Satellite and not “SAARC Satellite”.

41. **Ans: b**

It is a 15-year non-binding agreement. It says that state has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government and the private sector. It is improved version of the existing Hyogo Framework. Aim- The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

42. **Ans: d**

The United Nations Human Settlements Programme (UN-Habitat) is the United Nations agency for human settlements and sustainable urban development. It was established in 1978 as an outcome of the First UN Conference on Human Settlements and Sustainable Urban Development (Habitat I) held in Vancouver, Canada in 1976. UN-Habitat maintains its headquarters at the United Nations Office at Nairobi, Kenya. It is mandated by the United Nations General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. It is a member of the United Nations Development Group. The mandate of UN-Habitat derives from the Habitat Agenda, adopted by the United Nations Conference on Human Settlements (Habitat II) in Istanbul, Turkey, in 1996.

43. **Ans: b**

GEAC is a statutory body under MoEFCC. It is the apex body for approval of proposals relating to release of genetically engineered organisms and products into the environment. The GEAC considers proposals for trial only after approval from the RCGM (Review Committee on Genetic Manipulation - a body comprising scientists) under Dept. of Biotechnology. Recently, they gave a positive recommendation for the commercial use of GM mustard for 4 years subject to certain field conditions.

44. **Ans: a**

Masala bonds are rupee-denominated bonds issued by Indian entities in the overseas market to raise funds. As of now, it is being traded only at the London Stock exchange. Masala bonds have been named so by the International Finance Corporation (IFC), an investment arm of the World Bank which issued these bonds to raise money for infrastructure projects in India. They protect investors from exchange rate fluctuations as opposed to external commercial borrowing (ECB) that have to be raised and repaid in dollar.

45. **Ans: d**

DHOLA SADIYA BRIDGE or Bhupen Hazarika bridge. It is India's longest bridge measuring 9.15 km. It has been named after famous lyricist-singer Bhupen Hazarika. It is longer than the previous longest bridge in India i.e. Bandra-Worli sea link.

46. **Ans: d**

Raja Ram Mohan Roy is also known as “Maker of Modern India”, “Father of Modern India” and “Father of the Bengal Renaissance”. The title “Raja” was given to him by the Mughal emperor Akbar Shah II. He fought against sati, child marriage and the prohibition of widow remarriage. In August 1828, he founded the Brahma Sabha which later came to be known as Brahma Samaj. It was the culmination of his earlier Atmiya Sabha of 1814. The Brahma Samaj championed the worship of one god and brotherhood and interdependence. He wanted to combine the goodness of western ideals and the Indian culture. He setup the Hindu College in Calcutta in 1822.

47. **Ans: c**

Migratory bird most commonly found in China. It is legally protected in Bhutan and India and is considered sacred to certain Buddhist traditions. IUCN status – Vulnerable. Listed in India’s Wildlife Act as a Schedule 1 species It is locally known as Dhung Dhung Karma. Also it is the only high altitude crane amongst the 15 species found in the world. These birds build their nests in vast open environments, making them vulnerable to a host of predators.

48. **Ans: b**

NCERT fact. Basaveswara or Basavanna is considered to be the founder of Lingayatism or Lingayat Sect or Veerashaivism. He was responsible for sweeping social changes in Karnataka during 12th century. He stood for the upliftment of the downtrodden and fought the evils that had crept into the Brahmanic Vedic tradition. He scripted his practical experiences in a novel form of literature called – Vachana (poetry). The main aim of Vachana (poetry) movement propagated welfare for all. He heralded the establishment of ‘Kalyana Rajya’ (Welfare state). He gave two important and innovative concepts called “Sthavara ”and “Jangama”, the meaning of which is “Static” and “Dynamic” which are the main foundation stones of the revolutionary ideology of Basavanna

49. **Ans: c**

Gravitational waves are distortions or ‘ripples’ in the fabric of space-time caused by some of the most violent and energetic processes in the Universe. These ripples travel at the speed of light through the Universe, carrying with them information about their cataclysmic origins, as well as invaluable clues to the nature of gravity itself.

50. **Ans: d**

Brahmos is a supersonic cruise missile (speeds of Mach 2.8 to 3.0). It is the world’s fastest anti-ship cruise missile in operation. It successfully hit the land-based target with bulls eye precision in a “top attack configuration”, meeting all flight parameters in a copybook manner. The strike range of the missile was enhanced from 290 km to 450 km. It is a multi-platform, multi mission missile; capable of being launched from land, air, sea, sub-sea against surface and sea-bed targets. Brahmos was jointly developed by DRDO (India) and NPOM (Russia). After India became a member of the Missile Technology Control Regime (MTCR) in 2016, India and Russia are now planning to jointly develop a new generation of Brahmos missiles with 600 km-plus range. Earlier range was restricted to sub-300 kms.

51. **Ans: c**

Higher Education Funding Agency (HEFA) is jointly promoted by the identified Promoter and the Ministry of Human Resource Development (MHRD) with an authorised capital of Rs.2,000 crore. The Government equity would be Rs.1,000 crore.

The HEFA is formed as a SPV within a PSU Bank/ Government-owned-NBFC (Promoter). It would leverage the equity to raise up to Rs. 20,000 crore for funding projects for infrastructure and development of world class Labs in IITs/IIMs/NITs and such other institutions.

The HEFA would also mobilise CSR funds from PSUs/Corporates, which would in turn be released for promoting research and innovation in these institutions on grant basis.

The HEFA would finance the civil and lab infrastructure projects through a 10-year loan. The principal portion of the loan will be repaid through the 'internal accruals' (earned through the fee receipts, research earnings etc) of the institutions. The Government would service the interest portion through the regular Plan assistance.

All the Centrally Funded Higher Educational Institutions would be eligible for joining as members of the HEFA. For joining as members, the Institution should agree to escrow a specific amount from their internal accruals to HEFA for a period of 10 years. This secured future flows would be securitised by the HEFA for mobilising the funds from the market. Each member institution would be eligible for a credit limit as decided by HEFA based on the amount agreed to be escrowed from the internal accruals.

The HEFA is a novel method of funding the premier institutions by using the instrument of 'securitising the future flows'. Under this, each institution agrees to escrow a specific amount from their internally earned resources (not govt grants) to HEFA. This forms basis for a credit line which can be used by the institution for creating the required capital and research assets. The Principal portion is repaid from the escrowed amount and the interest is met by Govt. For the institution, this is an interest-free amount and gives facility to the institution to build the required research infrastructure of world class.


The HEFA was registered as a Section – 8 Company under the Companies Act on 31st May 2017. Canara Bank has been identified as the partner for setting up the Company. Government has released Rs. 250 Cr equity and the Canara Bank has given Rs. 50 Cr equity in the HEFA. RBI has granted a license under the RBI Act for HEFA to operate as NBFC on 21st November 2017 and to leverage the equity to mobilise money from market as per the requirements of the institutions.

The Board has been constituted and held its first meeting under the Chairmanship of Secretary Higher Education on 12th June 2017.

52. **Ans: a**

Food for thought
Fortification of eatables is aimed at fighting malnutrition

What it means
Fortification is the addition of key vitamins and minerals, such as iron, iodine, zinc, Vitamins A & D, to staple foods such as rice, milk and salt to improve their nutritional content



- The nutrients may or may not have been originally present in the food before processing
- It is a simple, proven, cost-effective and complementary strategy in use across the globe
- The draft Food Safety and Standards Regulations, 2016, prescribe the standards for fortification of salt, oil, milk, and rice

53. **Ans: a**

Beaufort Sea is a marginal sea of Arctic Ocean famous for its combustible gas and energy resources. It is in Arctic ocean, in the Canada and Alaska coast.

54. **Ans: c**

Great Indian Bustard is a large bird with a horizontal body and long bare legs giving it an ostrich like appearance. This bird is among the heaviest of the flying birds. Found in central India, western India and eastern Pakistan. Its habitat includes arid and semi-arid grasslands, open country with thorn scrub, tall grass interspersed with cultivation. It avoids irrigated areas. Listed in Schedule I of the Wildlife (Protection) Act, 1972 and CMS or Bonn Convention. It is also listed in Appendix I of CITES, as Critically Endangered on the IUCN Red List.

55. **Ans: c**

Dept was established in 2008

56. **Ans: c**

The principal officers of the central government in Mughal administration were four:

- a. Diwan/Wazir: Chief Minister, mainly handled revenue and finance. Work of other departments were also under his control. All the imperial orders were first recorded in his office before it is released.
- b. Mir Bakshi : Military head
- c. Mir Saman: Dealt with work relating to state krkhanas, stores, ordinance and communications
- d. Sadr/Sadr-i-jahan: Director of religious matters, charity and endowments

Sipah Salar was provincial governor.

57. **Ans: d**

Mughals interfered very little with the local life of the village communities, for they had no resident functionary of their own in villages. Muqaddam was normally the sarpanch of the village Panchayats which dealt with local disputes, arrange for watch and ward.

The Faujdar and Kotwals were equivalent to modern district level officers appointed by Central Government. Faujdar was the administrative head of the sirkar (district), was appointed by the emperor but was under the supervision and guidance of the governor. Kotwals were not provincial officers, but were appointed by central government in the provincial capitals and other important cities, and performed a number of executive and ministerial duties too similar to the police commissioners in British India

Mir Bahr was a post during Mughal administration equivalent to modern Port Commissioner. He had the powers over customs also.

58. **Ans: a**

The first statement is correct. The French East India Company was a state undertaking company whose directors were appointed by the crown. The lethargy and bureaucratic control of this company was one of the reasons of its failure. On the other hand, the English East India Company was a private undertaking.

The second statement is incorrect. The British East India Company was at an advantage over its French counterpart because its headquarters was at Calcutta and Bengal, which was the richest

region of India at that time. The Dutch and the French were present in Bengal only through their subordinate factories, like Chinsura of Dutch and Chandernagar of the French.

59. **Ans: b**

In this question, second statement is not correct.

We should note that the Dastak was the trade permit sanctioned to the east India company by Farruksiyar's firman of 1717. Under the terms of this firman, East India Company was entitled to trade in Bengal without paying the normal customs duty. On the basis of the rights entrusted to the company, it started issuing Dastaks, authorizing its agents to trade customs-free within the province of Bengal.

The firman covered only free trade by the company and not the private trade of its servants. This was one of the big confusions. Practically, the servants of the company generally abused the free trade right by producing the Dastak to the Chowkies of the government. But the chowkidars had reasons to believe that most of the Dastaks produced by company traders were produced just to cover their own private trade. Not only that, the company sold Dastaks at high price not only to European private traders but also to native merchants. This rampant abuse of Dastak was one of the key issues of conflicts between the nawab and the company.

60. **Ans: d**

Annihilation of individual ego and recognition of the fundamental unity of God, creation and individual self

61. **Ans: c**

Delhi sultanate came to an end in India in 1526 with the defeat of Ibrahim Lodi.

Dadu Dayal was born in 1544. He was the founder of Dadupanth in Rajasthan. He believed that devotion to God should transcend religious or sectarian affiliation, and that devotees should become non-sectarian or nipakh

Kabir was a 15th Century Indian mystic poet and Indian mystic poet and saint, whose teachings influenced Bhakti movement.

Ramananda was the teacher of Kabir. He was a 14th Cent Vaishnava devotional poet sant in the Ganga river regions. Hindu tradition recognises him as the founder of Ramanandi Sampradaya, the largest monastic Hindu renouncing community in modern times.

Guru Nanak was the founder of Sikhism and the first of 10 Sikh gurus. He lived from 1469 to 1539

62. **Ans: c**

Informatory

63. **Ans: d**

Languages are developed due to interactions of people, **Administrative needs**- Persian as official language, **Social Intermixing**- urdu, **Trade and economic transactions** led to mixing and development of various languages.

64. **Ans: d**

For the first time it was Sultan Sikandar Lodī who moved his capital from Delhi to Agra in the year 1506. The first Mughal emperor to crown Agra as capital of Mughal Empire, was Akbar in the year 1526. The capital of Mughal Empire was changed from Agra to Delhi by Shah Jahan in the year 1638. He shifted his capital from Agra to Old Delhi (traditionally known as Shahjahanabad) on 19 April 1638

65. **Ans: a**

Mansabdar implies the generic term for the military-kind grading of all royal functionaries of the Mughal Empire. The Mansabdari system introduced by Akbar was borrowed from the system followed in Mongolia.

66. **Ans: d**

Self-explanatory

67. **Ans: a**

The Indus receives a number of Himalayan tributaries such as the Shyok, the Gilgit, the Zaskar, the Hunza, the Nubra, the Shigar, the Gasting and the Dras. It finally emerges out of the hills near Attock where it receives the Kabul River on its right bank. The other important tributaries joining the right bank of the Indus are the Khurram, the Tochi, the Gomal, the Viboa and the Sangar. They all originate in the Sulaiman ranges. The river flows southward and receives 'Panjnad' a little above Mithankot. The Panjnad is the name given to the five rivers of Punjab, namely the Satluj, the Beas, the Ravi, the Chenab and the Jhelum.

68. **Ans: b**

The **Jhelum**, an important tributary of the Indus, rises from a spring at Verinag situated at the foot of the Pir Panjal in the south-eastern part of the valley of Kashmir. It flows through Srinagar and the Wular lake before entering Pakistan through a deep narrow gorge. It joins the Chenab near Jhang in Pakistan.

The **Chenab** is the largest tributary of the Indus. It is formed by two streams, the Chandra and the Bhaga, which join at Tandi near Keylong in Himachal Pradesh. Hence, it is also known as Chandrabhaga. The river flows for 1,180 km before entering into Pakistan.

The Ravi is another important tributary of the Indus. It rises west of the Rohtang pass in the Kullu hills of Himachal Pradesh and flows through the Chamba valley of the state. Before entering Pakistan and joining the Chenab near Sarai Sidhu, it drains the area lying between the southeastern part of the Pir Panjal and the Dhauladhar ranges.

The **Beas** is another important tributary of the Indus, originating from the Beas Kund near the Rohtang Pass at an elevation of 4,000 m above the mean sea level. The river flows through the Kullu valley and forms gorges at Kati and Largi in the Dhauladhar range. It enters the Punjab plains where it meets the Satluj near Harike.

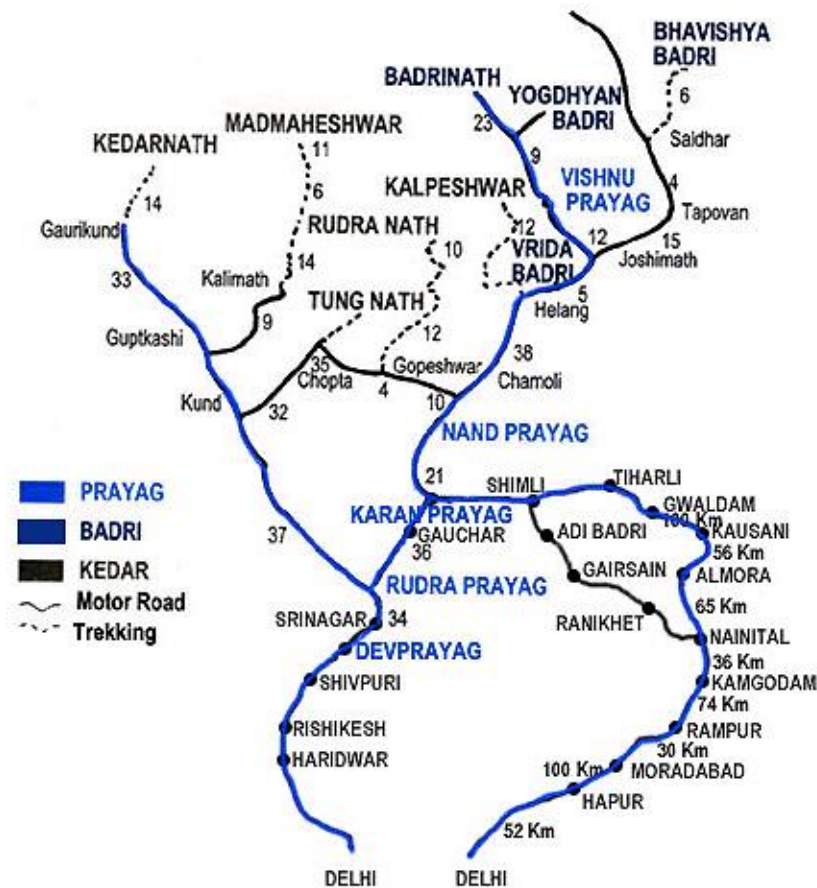
The **Satluj** originates in the Rakas lake near Mansarovar at an altitude of 4,555 m in Tibet where it is known as Langchen Khambab. It flows almost parallel to the Indus for about 400 km before entering India, and comes out of a gorge at Rupar. It passes through the Shipki La on the Himalayan ranges and enters the Punjab plains. It is an antecedent river. It is a very important tributary as it feeds the canal system of the Bhakra Nangal project

69. **Ans: a**

Self-explanatory

At **Nandaprayag**, Alaknanda meets Nandakini and at **Devprayag**, the Bhagirathi meets the Alaknanda; hereafter, it is known as the Ganga. The Alaknanda consists of the Dhuli and the Vishnu Ganga which meet at Joshimath or **Vishnu Prayag**. The other tributaries of Alaknanda such

as the Pindar joins it at **Karna Prayag** while Mandakini or Kali Ganga meets it at **Rudra Prayag**. The Ganga enters the plains at Haridwar.



70. **Ans: c**

Self-explanatory.

71. **Ans: d**

The Exclusive Economic Zone of India is a sea zone prescribed by the United Nations Convention on the Law of the Sea over which a state has special rights regarding the exploration and use of marine resources, including energy production from water and wind. It stretches from the baseline out to 200 nautical miles (nmi) from its coast

72. **Ans: a**

Uttar Pradesh shares common borders with 8 states and 1 UT. They are Rajasthan, Haryana, Himachal Pradesh, Delhi, Uttarakhand, Bihar, Jharkhand, Chattisgarh and Madhya Pradesh

Madhya Pradesh shares common borders with 5 states namely Gujarat, Rajasthan, UP, Chattisgarh and Maharashtra

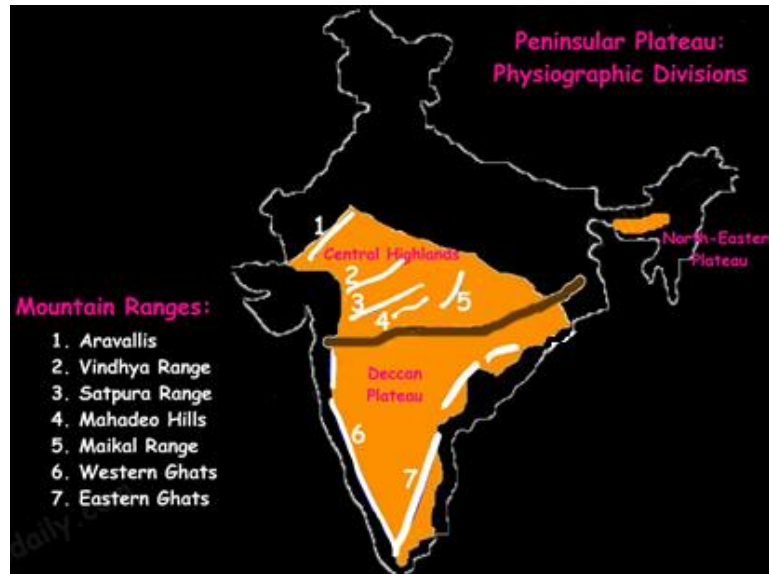
Chhattisgarh shares common borders with 7 states namely UP, Madhya Pradesh, Maharashtra, Telengana, Odisha, Andhra Pradesh and Jharkhand

West Bengal shares common borders with 5 states. They are Odisha, Jharkhand, Bihar, Sikkim and Assam

73. **Ans: d**

The Himalayan region contains many valuable minerals. There are vast potentialities of mineral oil in the tertiary rocks. Coal is found in Kashmir. Copper, lead, zinc, nickel, cobalt, antimony, tungsten, gold, silver, limestone, semi-precious and precious stones, gypsum and magnetite are known to occur at more than 100 localities in the Himalayas. Unfortunately, many of the mineral resources cannot be exploited at the present level of technological advancement due to adverse geographical conditions. Further advancements in modern technology may help in exploiting these resources. So the future possibilities of mineral exploitation in the Himalayas are great

74. **Ans: b**



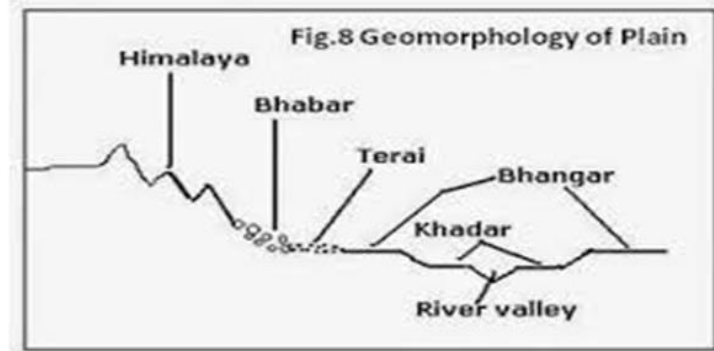
Shillong Plateau made of Meghalaya hills (Garo, Khasi & Jaintia Hills) as the boundary is the North Eastern Extension of Peninsular Plateau.

75. **Ans: b**

The Northern Plain was formed by the deposits brought in by the three major rivers and their tributaries namely Indus, Ganga and Brahmaputra. The plains mostly comprise of flat land. There are 4 distinct relief features.

1. **Bhabar:** The bhabar is a pebble covered belt... All the streams disappear into this belt. It lies along the foot of the Shiwaliks from the Indus to the Tista. It lies parallel the Shiwalik slopes. It is 8 to 16 km. in width. This region is not much suitable for agriculture.
2. **Terai:** South of the Bhabar belt lies the Terai belt. It is 20 to 30 kms wide. It is composed of comparatively finer alluvium and is covered by forests. These forests were cut to enable cultivation. The underground streams of the Bhabar re-emerge on the surface and give birth to marshy area and is excessively damp
3. **Bhangar:** The Bhangar is the largest part of the plains. It is covered with rich alluvial soil. The Bhangar presents a terrace like feature. The soil in this region is not renewed frequently, it is old alluvial soil and is not very fertile. It contains calcareous deposits locally known as 'Kankar '.

4. **Khadar:** The Khadar belt is made up of newer deposits and fine granules from the rivers and fine granules. The soil is renewed often due to the frequent flooding of the flowing rivers. This belt is ideal for agriculture. It also has Kanker and is suitable for extensive cultivation.



76. **Ans: c**

Siachen glacier is the longest glacier in the country with a length of 72 km situated in the Nubra valley located in the eastern Karakoram Range. It is the longest glacier in the Karakoram and second-longest in the world's non-polar areas. It falls from an altitude of 5,753 m above sea level at its head at Indira Col on the China border down to 3,620 m at its terminus. The entire Siachen Glacier, with all major passes, is currently under the administration of India since 1984 following operation Meghadoot. The Siachen Glacier lies immediately south of the great drainage divide that separates the Eurasian Plate from the Indian subcontinent in the extensively glaciated portion of the Karakoram sometimes called the "Third Pole".

77. **Ans: d**

Informative and self-explanatory.

78. **Ans: a**

UT	Area in km ²	Share of total land area
Andaman & Nicobar Islands	8,249	0.25
Delhi	1,484	0.04
Puduchery	562	0.01
Dadra & Nagar Haveli	491	0.01
Chandigarh	114	0.003
Daman & Diu	112	0.003
Lakshadweep	32	0.001

79. **Ans: c**

Rajasthan is followed by Jammu & Kashmir, Madhya Pradesh, Maharashtra, Andhra Pradesh, Himachal Pradesh and Gujarat in terms of waste land area

Wasteland is an empty area of land, especially in or near a city, which is not used to grow crops or built on, or used in any way and/or a place, time or situation containing nothing positive or productive, or completely without a particular quality or activity. The Technical Task Group Report of the **National Wastelands Development Board** defines the wasteland as a land which is presently lying unutilized due to different constraints.

ICAR proposed that Wastelands are lands which due to neglect or due to degradation are not being utilized to their full potential. These can result from inherent or imposed disabilities or both, such as location, environment, chemical and physical properties, and even suffer from management conditions.

According to **Integrated Wasteland Development Programme**, Wasteland is a degraded land which can be brought under vegetative cover, with reasonable effort, and which is currently underutilised and land which is deteriorating for lack of appropriate water and soil management or on account of natural causes

Categories of wasteland for Identification

- 1. Culturable Wasteland-** The land which is has potential for the development of vegetative cover and is not being used due to different constraints of varying degrees, such as erosion, water logging, salinity etc.
- 2. Unculturable Wasteland-** The land that cannot be developed for vegetative cover, for instance the barren rocky areas and snow covered glacier areas.

Categories of wasteland for Identification (Based on causative agents)

WATER	WIND	MAN	OTHERS
Sheet Erosion	Sand Dunes	Mine Spoils	Land Slides
Rill Erosion	Sand Bar	Shifting Cultivation	Shallow Soils
Gully Erosion	Coastal	Industrial Wasteland	
Ravinous Land	Sand		
Saline Soil			
Marshy Land			
Water Logged			
Alkali Soil			

80. **Ans: d**

The Aravalli range are the oldest mountains in India. It is coming under the classification of relic mountains, which are the denuded remnants of old fold mountains. Presently there is no orogenic activity in the region, It is one of the world's oldest mountain ranges and dates back to a pre-Indian subcontinental collision with the mainland Eurasian Plate. The southern end is at Palanpur near Ahmedabad, Gujarat. The highest peak is Guru Shikhar in Mount Abu in Rajasthan

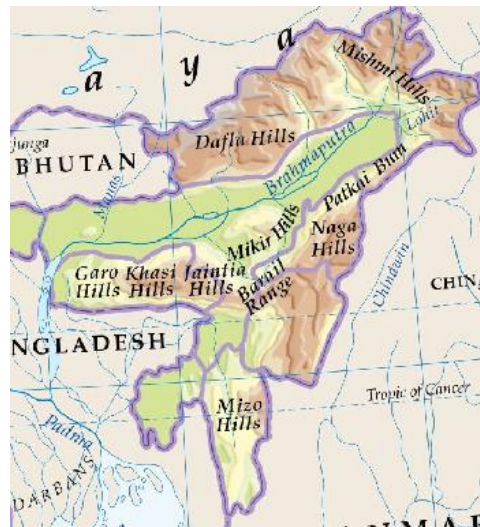
81. **Ans: b**

Vindhyas are Block Mountains which runs parallel to the Narmada rift valley. The paired horst of Vindhya is made by Satpura, to the south of Narmada valley. Vindhya is a discontinuous chain of mountain ridges, hill ranges, highlands and plateau escarpments

82. **Ans: d**

Informative and self-explanatory

83. **Ans: a**



84. **Ans: d**

Sir Creek (local name Baan Ganga) is a 96 kilometres long estuary in the marshes of the Rann of Kutch where Arabian Sea joins the land mass. It's basically a fluctuating tidal channel, not truly a flowing creek. It currently lies on the border of India's Gujarat and Pakistan's Sindh province. In marshy areas like the Rann, landmasses emerge and slip back into water.

During Monsoon it floods its banks and envelops the low-lying salty mudflats around it and in winter it is home to flamingos and other migratory birds.

Pakistan lays claim to the entire creek as per paragraphs 9 and 10 of the Sind Government Resolution of 1914 signed between the then Government of Sindh and Rao Maharaj of Kutch. The resolution, which demarcated the boundaries between the one territories, included the creek as part of Sindh, thus setting the boundary as the eastern flank of the creek. India sticks to its position that the boundary lies mid-channel as depicted in another map drawn in 1925, and implemented by the installation of mid-channel pillars back in 1924.

India supports its stance by citing the thalweg doctrine in international law. The law states that river boundaries between two states may be, if the two states agree, divided by the mid-channel. Though

Pakistan does not dispute the 1925 map, it maintains that the doctrine is not applicable in this case as it most commonly applies to non-tidal rivers, and Sir Creek is a tidal estuary. India rejects the Pakistani stance by maintaining the fact that the creek is navigable at high tide and that the thalweg principle is used for some international boundaries in tidal waters, and that fishing trawlers use Sir Creek to go out to sea. Another point of concern for Pakistan is that Sir Creek has changed its course considerably over the years. If the boundary line is demarcated according to the thalweg principle applied to the current channel, Pakistan and India would both lose small amounts of wetlands territory that was historically part of their provinces. More significantly, acceding to India's stance would result in the shifting of the land/sea terminus point several kilometres to the detriment of Pakistan, leading in turn to a loss of several thousand square kilometres of its Exclusive Economic Zone under the United Nations Convention on Law of the Sea.



The Green Line is the boundary as claimed by Pakistan, red line is boundary claimed by India.

The strategic or military importance of Sir Creek is little. The core importance of the Sir Creek is because of the fishing resources. Sir Creek is considered to be one of the largest Fishing grounds in Asia. Further, immense potential economic benefits as the marshlands are estimated to be rich in hydrocarbons and shale gas, is another importance of Sir Creek

85. **Ans: d**

Rann of Kutch the largest salt desert in India. Salar de Uyuni (or Salar de Tunupa) is the world's largest salt flat. It is located in southwest Bolivia, near the crest of the Andes

Agariyas are nomadic tribes and traditionally salt farmers in Rann of Kutch, a seasonal salt marsh in Thar Desert, Rajasthan. The tribes derive their names from the word “Agar” meaning salt farms. During the monsoon months, the Rann of Kutch is submerged in sea water. As the sea water finally begins to recede in October, the Agariyas move in and begin the elaborate process of salt farming. This salt is different from the marine salt produced on the coast and is locally known as Badagara, literally meaning Bada (big) and Agara (pan). They suffer from skin lesions, severe eye problems, tuberculosis and abnormally thin legs, stiff with years of exposure to high concentration of salt. After the salt production season, they move to the peripheral villages.

Medaks are elevated pieces of land where vegetation grows in the region

At night, an unexplained strange dancing light phenomena known locally as **Chir Batti** (ghost lights) occurs in the Rann, the adjoining Banni grasslands, and the seasonal wetlands.

86. **Ans: b**

Humayun, the eldest son of Babur; means fortunate but was most unfortunate ruler of Mughal empire. Busy fighting with Afghans (Sher Khan / Sher Shah) in east, he got the news that Bahadur Shah of Gujarat was advancing towards Delhi. He hence made treaty with Sher Shah. Humayun captured Gujarat from Bahadur Shah & made Akbar its governor, but soon Bahadur Shah recovered it from Akbar. Fought Sher Shah in battle of Chausa.

87. **Ans: a**

Ibadat khana (house of worship where scholars from all religion meet to discuss religious policies). Also a previous UPSC question... Known as Diwan-I-Khaas too.

88. **Ans: d**

Aurangzeb was a notable expansionist and during his reign, the Mughal Empire reached its greatest extent, ruling over nearly all of the Indian subcontinent. During his lifetime, victories in the south expanded the Mughal Empire to 4 million square kilometres. Under his reign, India surpassed China once again to become the world's largest economy.

Aurangzeb has been subject to controversy and criticism for his policies that abandoned his predecessors' legacy of pluralism and religious tolerance, citing his introduction of the Jizya tax, destruction of Hindu temples, and execution of the ninth Sikh guru, Guru Tegh Bahadur. While other historians question this, arguing that his destruction of temples has been exaggerated, and noting that he also built temples, also destroyed Islamic mosques, paid for the maintenance of temples, employed significantly more Hindus in his imperial bureaucracy than his predecessors did, and opposed bigotry against Hindus and Shia Muslims. Rebellions and wars eventually led to the exhaustion of the imperial Mughal treasury and army.

He ordered destruction of several prominent temples that had become associated with his enemies. He also built many temples.

His orders on restricting festivities include not only Holi, he took similar stances related to Muharram and Eid as well. He banned processions and celebrations, being an orthodox muslim. Throughout his kingdom, drinking was prohibited and cultivation and the use of bhang and other drugs were banned

With the rise in the political and material influence of the institution of guruhood, the Sikh gurus were increasingly seen as political rivals by petty kingdoms of the Mughal Empire. Their influence and strength was also visible to the Mughal emperor. Being politically against the guru, he executed 9th Sikh Guru Tegh Bahadur. Even though Khalsa Panth started following the execution of Guru Arjan Singh, the 5th Guru, this resulted in the institutionalization of Khalsa, making Sikhs a warring community. His religious policies turned Rajputs, Sikhs, Marathas, Jats & Satnamis against him & hence became the reasons for decline of Mughal Empire.

Also, Deccan ulcer is also termed another reason for the decline of Mughal Empire. The three powers in the Deccan with which he had to deal were the Marathas and the two Shia states of Bijapur and Golkonda. But up to 1681, Aurangzeb won no appreciable success in the Deccan. This was because Prince Shah Alam, the Governor of the Deccan for eleven years, was lacking in vigor and enterprise. Besides, the Emperor was prevented from giving whole-hearted attention to affairs in the Deccan because of his pre-occupations with his wars with the north-western frontiers tribes, on one hand and the Rajputs on the other. The death of Shivaji in 1680 brought about a change in the

Deccan situation and the Emperor lost no time in taking full advantage of it. First he captured the Shia states and then turned to Maratha, and killed Sambhaji, the son of Shivaji and the ruler of Maratha. But they continued to resist under Rajaram, younger son of Shivaji and his wife Tarabai.

Aurangzeb's Deccan policy was a miserable failure. His wars against Bijapur and Golkunda did not ease the task of the Maratha, but these alienated the Shia Muslim sentiment. His drive against the Marathas involved him in heavy expenses and brought him no success. Though, Aurangzeb could defeat his enemies, he could not get complete control over them.

The endless war in the Deccan exhausted his treasury, the Government turned bankrupt, the soldiers starving from arrears of pay, mutinied. The Deccan ulcer ultimately ruined Aurangzeb

89. **Ans: b**

Agra fort was constructed during Akbar's reign. Diwan-i-Khas and Diwan-i-Aam are seen in both Red Fort and Fatehpur Sikri.

90. **Ans: c**

He first served as a private, a soldier of the lowest military rank, before rising to become a commander in the Mughal army under Babur and then the governor of Bihar. In 1537, when Babur's son Humayun was elsewhere on an expedition, Sher Shah overran the state of Bengal and established the Sur dynasty. During his five-year rule from 1540 to 1545, he set up a new civic and military administration, issued the first *Rupiya* from "Taka" and re-organised the postal system of India. He further developed Humayun's *Dina-panah* city and named it Shergarh and revived the historical city of Pataliputra, which had been in decline since the 7th century CE, as Patna. He extended the Grand Trunk Road from Chittagong in the frontiers of the province of Bengal in northeast India to Kabul in Afghanistan in the far northwest of the country.

91. **Ans: b**

Agriculture= 17%

Industry=29%

Service=54%

92. **Ans: a**

In India, between 1950 and 1990, the proportion of GDP contributed by agriculture declined significantly but not the population depending on it (67.5% in 1950 to 64.9% by 1990). Agriculture in India suffers from disguised unemployment.

93. **Ans: c**

The CCEA has recently extended the mandatory packaging norms under the Jute Packaging Material (JPM) Act, 1987. The approval mandates that 90% of the food grains and 20% of the sugar products shall be mandatorily packed in jute bags. The Jute Year 2017-18 period is from 1st July 2017 to 30th June, 2018.

94. **Ans: b**

The portal will provide detailed information to farmers about bovine animals. Farmers by accessing this portal can get to know information like certified animals picture, its parents' information, breeding, the volume of milk given by bovine animal etc. In addition, animal fodder varieties, its volume and price information will also be made available at this portal. The portal will also enable farmers to buy advanced breeds of bovine animals at a reasonable price as well as to buy cattle frozen semen and, embryo as per their requirements.

95. **Ans: a**

It was inflation, not deflation. In the late 1980s, government expenditure began to exceed its revenue by such large margins that it became unsustainable. Prices of many essential goods rose sharply. Imports grew at a very high rate without matching growth of exports. Foreign exchange reserves declined to a level that was not adequate to finance imports for more than two weeks. There was also not sufficient foreign exchange to pay the interest that needs to be paid to international lenders.

96. **Ans: d**

Small Industries Development Bank of India (SIDBI) has launched the 'Udyami Mitra' Portal (www.udyamimitra.in) to improve accessibility of credit and handholding services to Micro, Small and Medium Enterprises (MSMEs). Scheduled Commercial Banks (SCBs) have been advised to ensure a target of 7.5% of Adjusted Net Bank Credit (ANBC) for Micro Enterprises, that collateral security is not required for loans upto Rs. 10 lakh to MSE sector, a simplified working capital requirement for MSEs.

97. **Ans: c**

Under Atal Innovation Mission, ATIs are innovation play workspaces for students between Grade VI to Grade XII, stimulating innovations combining science & technology. These open-ended innovation workspaces equipped with state of the art technologies like 3D printers, Robotics, Sensor Technology Kits, Internet of Things, miniaturized Electronics etc enable the students to learn and solve local community problems using emerging Technologies. Students are encouraged to explore and experience Design Thinking and Innovation, using a do-it-yourself approach, and develop innovative solutions to India's social, community or economic problems.

98. **Ans: c**

Enterprises engaged in the manufacture or production, processing or preservation of goods as specified below: A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh. A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore. A medium enterprise is an enterprise where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore.

For service, a micro enterprise is an enterprise where the investment in equipment does not exceed Rs. 10 lakh. A small enterprise is an enterprise where the investment in equipment is more than Rs.10 lakh but does not exceed Rs. 2 crore. A medium enterprise is an enterprise where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

99. **Ans: d**

Secondary (22%)<Tertiary(27%)<Primary(51)

100. **Ans: b**

1 refers to a socialist economy; In a mixed economy, the government and the market together answer the three questions of what to produce, how to produce and how to distribute what is produced. In a mixed economy, the market will provide whatever goods and services it can produce well, and the government will provide essential goods and services which the market fails to do.