Maximum Marks: 70 Time Allowed: 3 hours

General Instructions:

- i. There are 30 questions in all.
- ii. All questions are compulsory.
- iii. Question numbers 1 to 18 are Multiple Choice Questions (MCQs) carrying 1 mark each.Write only the correct answer in your answer sheets.
- iv. Question numbers 19 to 22 are short answer questions carrying 3 marks each. Answer to each of these questions should not exceed 80-100 words.
- v. Question numbers 23 to 28 are long answer questions carrying 5 marks each. Answer to each of these questions should not exceed 150 words.
- vi. Question numbers 29 and 30 are related to identification or location and labelling of geographical features on maps, carrying 5 marks each.
- vii. Outline map of India and World provided to you must be attached within your answer book.
- viii. Use of template or stencils for drawing outline maps is allowed.

Section A

- 1. Which Indian state has the largest number of district?
 - a. Maharashtra
 - b. Uttar Pradesh
 - c. Bihar
 - d. Madhya Pradesh

Which is India's most polluted city?

- a. Delhi
- b. Mumbai
- c. Chennai
- d. Kolkata
- 2. Which one of the following states receives maximum number of immigrants?
 - a. Uttar Pradesh
 - b. Delhi
 - c. Maharashtra
 - d. Bihar
- 3. Which one of the following has caused the sex ratio of the United Arab Emirates to be lower?
 - a. Selective migration of male working population
 - b. High birth rate of males
 - c. High outmigration of females
 - d. Low birth rate of females

OR

Which one of the following countries has the highest sex ratio in the world?

- a. France
- b. Latvia
- c. United Arab Emirates
- d. Japan
- 4. Who comprise the largest Scheduled Tribe in India?

- a. Santhals
- b. Bhil
- c. Munda
- d. Kalbelia

The total number of states in India is at present

- a. 29
- b. 23
- c. 25
- d. 22

5. Ten most populous countries make up about _____ percent of world's population.

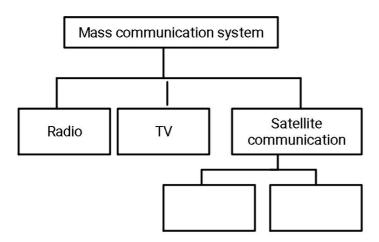
- a. 65
- b. 55
- c. 50
- d. 60
- 6. Which one of the following best describes development?
 - a. A decrease in size
 - b. A positive change in quality
 - c. A simple change in the quality
 - d. An increase in size
- 7. Which one of the following is not a plantation crop?

- a. Sugarcane
- b. Rubber
- c. Wheat
- d. Coffee
- 8. In which one of the following countries co-operative farming was the most successful experiment?
 - a. Denmark
 - b. Russia
 - c. India
 - d. Netherlands
- 9. Growing of flowers is called:
 - a. Floriculture
 - b. Truck farming
 - c. Factory farming
 - d. Mixed farming
- 10. The activities related to rural settlement are
 - a. tertiary activities
 - b. primary activities
 - c. none
 - d. secondary activities
- 11. Which state in India has the lowest density of population?
 - a. Madhya Pradesh

- b. Arunachal Pradesh
- c. Sikkim
- d. Assam
- 12. Which type of settlements are found in northern plains?
 - a. none
 - b. scattered
 - c. clustered
 - d. hamlet
- 13. Which one of the following is India's largest trading partner in 2003-04?
 - a. U.S.A.
 - b. Germany
 - c. U.K.
 - d. China
- 14. Which one of the following scholars introduced the concept of Human Development?
 - a. Prof. Amartya Sen
 - b. Dr. Mahbub-ul Haq
 - c. Ratzel
 - d. Ellen C. Semple

15. Fill in the blanks:

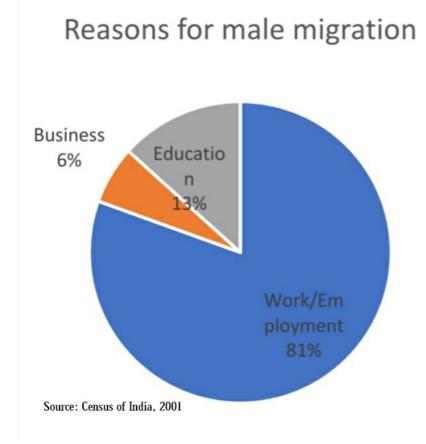
Give the appropriate ans:



- 16. Which of the following ports in India does not have a natural harbour?
 - a. Madras
 - b. Paradeep
 - c. Cochin
 - d. Vishakhapatnam
- 17. Which is India's oldest industry?
 - a. Tea
 - b. Jute
 - c. Cotton
 - d. Textiles
- 18. The Buckingham Canal is in
 - a. Kerala Karanataka
 - b. None of these
 - c. Andhra Pradesh Tamil Nadu
 - d. Kerala Tamil Nadu

Section **B**

- 19. What were major causes of rise in trade after Industrial Revolution?
- 20. Is there a valid dichotomy between the nature and human?
- 21. Study the chart given below:



- i. What is the main reason for male migration in India?
- ii. Why education is an important reason for male migration in India?
- iii. How male migration affects women?
- 22. What components are considered as symbols of development?

OR

Explain Western or euro-centric view of development.

Section C

23. What are the features of minerals?

Mention the uses of manganese and its producing states.

24. Study the picture given below and answer the questions that follow:



Pic: Clustered settlement

- i. Write some important features of the clustered settlement.
- ii. In which region of India such settlements are found?
- 25. Explain the features of modern large scale manufacturing.

OR

Large scale industries can earn more profit by reducing cost. Discuss those reasons which are responsible for it.

- 26. Explain the factors which affect the transport services.
- 27. Which continent has the highest road density? Why do traffic congestions occur on road? Explain any three measures to solve the problem of traffic congestion.

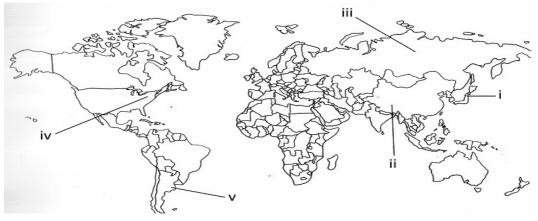
Explain the importance of communication services in the world.

28. Describe the effects and remedies for air pollution.

OR

What are the sources of pollution in the Ganga and the Yamuna? Also give its polluted stretch.

- 29. On the outline of the Indian map mark and indicate the following features.
 - i. Name the state leading producer of sugarcane.
 - ii. Jute producing state.
 - iii. Software Technology Park in the central area.
 - iv. Highest in-migrating state in west India.
 - v. West-end corridor.
- 30. On the given political map of the world, the following five features are shown. Identify these features with the help of the given key and write them on the blanks marked i, ii, iii, iv and v.
 - i. A major airport
 - ii. Mixed farming
 - iii. Largest country
 - iv. The great lakes region of America
 - v. A megacity



Solution Section A

1. (b) Uttar Pradesh

Explanation: Uttar Pradesh is divided into 75 districts under these 18 divisions: Saharanpur, Moradabad, Bareilly, Lucknow, Devipatan, Basti, Gorakhpur, Meerut, Aligarh, Agra, Kanpur, Faizabad, Azamgarh, Jhansi, Chitrakoot, Allahabad, Varanasi, Mirzapur. Out of this division, Allahabad is the most populous district in Uttar Pradesh.

OR

(a) Delhi **Explanation:** According to the World Health Organization (WHO) Delhi was the most polluted city in the world in 2014. In 2016 WHO downgraded Delhi to eleventh-worst in the urban air quality database. According to one estimate, air pollution causes the death of about 10,500 people in Delhi every year. During 2013-14 peak levels of fine particulate matter (PM) in Delhi increased by about 44%, primarily due to high vehicular and industrial emissions, construction work and crop burning in adjoining states. It has the highest level of the airborne particulate matter.

2. (c) Maharashtra

Explanation: Maharashtra.

3. (a) Selective migration of male working populationExplanation: Selective migration of male working population

OR

(b) Latvia

Explanation: Latvia

4. (a) Santhals

Explanation: Santhals tribe mainly resides in the states of Jharkhand, West Bengal, Bihar, Odisha, Assam. They are one of the largest tribal communities in India. The Santhal mostly speak Santhali, the one of Adivasi's(tribe) language.

(a) 29

Explanation: The total number of Indian states are 29. These are Andhra Pradesh,Arunachal Pradesh,Assam, Bihar,Chhattisgarh, Goa,Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerela, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha,Punjab, Rajasthan, Sikkim,Tamil Nadu, Telangana, Tripura, Uttarakhand,Uttar Pradesh,West Bengal.

5. (d) 60

Explanation: 60

- 6. (b) A positive change in qualityExplanation: A positive change in quality
- 7. (c) Wheat

Explanation: Wheat

- 8. (a) Denmark **Explanation:** Denmark
- 9. (a) Floriculture

Explanation: Floriculture

10. (b) primary activities

Explanation: Rural settlements are most closely and directly related to land. They are dominated by primary activities such as agriculture, animal husbandry, fishing, etc. The settlements' size is relatively small.

11. (b) Arunachal Pradesh

Explanation: Arunachal Pradesh has the lowest density of population in India. According to 2011 census of India, the total population of Arunachal Pradesh is roughly 1.4 million on an area of 84,000 km², amounting to a population density of about

 17 km^{-2} far below the Indian average of 370 km^{-2} .

12. (c) clustered

Explanation: clustered

13. (a) U.S.A.

Explanation: U.S.A.

14. (b) Dr. Mahbub-ul Haq

Explanation: Dr. Mahbub-ul Haq

- 15. INSAT, IRS
- 16. (b) Paradeep

Explanation: Located in Orissa, Paradeep is the deepest land-locked and well-protected port along the east coast.

17. (b) Jute

Explanation: Jute, the golden fibre, is the raw material for one of India's oldest industries. The first jute mill started production in Bengal in 1856. The first jute mill was established at Rishra, on the River Hooghly near Calcutta in 1855 when Mr. George Acland brought jute spinning machinery from Dundee. Four years later, the first power-driven weaving factory was set up.

18. (c) Andhra Pradesh - Tamil Nadu

Explanation: The Buckingham Canal is a 796 kilometres (494.6 mi)long freshwater navigation canal, running parallel to the Coromandel coast of South India from Kakinada in the East Godavari district of Andhra Pradesh to Villupuram district in Tamil Nadu. The canal connects most of the natural backwaters along the coast to Chennai port.

Section **B**

- 19. The major causes of industrialization in trade are
 - i. After the Industrial Revolution, the demand for raw materials like grains, meat, wool also expanded, but their monetary value declined in relation to the manufactured goods.
 - ii. The industrialised nations imported primary products as raw materials and exported the value-added finished products back to the non-industrialised nations.
 - iii. In the later half of the nineteenth century, regions producing primary goods were no more important, and industrial nations became each other's principle customers.
- 20. The dichotomy between physical and human is not a very valid one because nature and human are inseparable elements and should be seen holistically. It is interesting to note that both physical and human phenomena are used as metaphor in using

symbols from the human anatomy, for example, the face of the earth, eye of the storm, mouth of the river etc and even German geographer described state and country as living organisms and the outwork of road, railway etc

- 21. i. Migration for employment-related reasons is one of the prominent reasons for male migration in India.
 - ii. In many places, cultural norms and expectations dictate that men are more likely than women to seek employment outside the home. In this context, educational attainment might have stronger effects on migration for men, and weaker effects for women.
 - iii. In the absence of husbands, women are de facto household heads project themselves as the 'behind-the-scene' decision-makers, while trying to live according to the expectations of the patriarchal ideology, conferring the role of major decision-maker.
- 22. Development means "improvement in country's economic and social conditions". More specially, it refers to improvements in way of managing an area's natural and human resources. In order to create wealth and improve people's lives.

The main components of development are Computerisation, industrialisation, efficient transport and communication network, large education system, advanced and modern medical facilities, safety and security of individuals, women empowerment, social welfare etc.

OR

Computerisation, industrialisation, efficient transport and communication network, large education system, advanced and modern medical facilities, safety and security of individuals, etc. are considered as the symbols of development. Every individual, community and government measures its performance or levels of development in relation to the availability and access to some of these things. But, this may be partial and one-sided view of development. It is often called the western or euro-centric view of development.

Section C

- 23. Minerals have certain features:
 - i. A mineral has one specific chemical composition.
 - ii. Minerals are distinguished by various chemical and physical properties.
 - iii. Differences in chemical composition and crystal structure distinguish the various species, which were determined by the mineral's geological environment when formed.
 - iv. Changes in the temperature, pressure, or bulk composition of a rock mass cause changes in its minerals.
 - v. The hardness of a mineral defines how much it can resist scratching. This physical property is controlled by the chemical composition and crystalline structure of a mineral.
 - vi. Metallic and sub-metallic minerals have high reflectivity like metal; examples of minerals with this lustre are galena and pyrite.
 - vii. Colour is the most obvious property of a mineral, but it is often non-diagnostic. It is caused by electromagnetic radiation interacting with electrons.High specific gravity is a diagnostic property of a mineral
 - viii. There is an inverse relationship in quality and quantity of minerals: It means that the quantity of high quality minerals is less and quantity of low quality minerals is high. In other words, more is the quantity, less is the quality and less is the quality, more is the quantity.
 - ix. All minerals are exhaustible over time: None of the minerals is a renewable source but many of them can be recycled and re-used.
 - x. These minerals take long time to develop geologically and they cannot be replenished immediately at the time of need: This feature of minerals makes it compulsory to make optimum utilisation of minerals.

Uses:

- i. Manganese is too brittle to be of much use as a pure metal. It is mainly used in alloys, such as steel.
- ii. Steel contains about 1% manganese, to increase the strength and also improve

workability and resistance to wear.

- iii. Manganese steel contains about 13% manganese. This is extremely strong and is used for railway tracks, safes, rifle barrels and prison bars.
- iv. Drinks cans are made of an alloy of aluminium with 1.5% manganese, to improve resistance to corrosion.
- v. Manganese is also used as a catalyst, decolorize the glass that is colored green by iron impurities.
- vi. Manganese sulfate is used to make a fungicide.
- vii. Manganese oxide is a powerful oxidising agent and is used in quantitative analysis. It is also used to make fertilisers and ceramics

Manganese Producing states:

- i. Manganese deposits are found in almost all geological formations, however, it is mainly associated with Dharwar system.
- ii. Orissa is the leading producer of manganese. Major mines in Orissa are located in the central part of the iron ore belt of India, particularly in Bonai, Kendujhar, Sundergarh, Gangpur, Koraput, Kalahandi and Bolangir.
- iii. Karnataka is an another major producer and here the mines are located in Dharwar, Bellary, Belgaum, North Canara, Chikmagalur, Shimoga, Chitradurg and Tumkur.
- iv. Maharashtra is also an important producer of manganese which is mined in Nagpur, Bhandara and Ratnagiri districts.
- v. Andhra Pradesh, Goa, and Jharkhand are other minor producers of manganese.
- 24. i. Important features of the clustered settlement are:
 - a. It is a compact or closely built-up area of houses.
 - b. In this type of/village, the general living area is distinct and separated from the surrounding farms, barns, and pastures.
 - c. The closely built-up area and its intervening streets present some recognisable pattern or geometric shapes, such as rectangular, radial, linear, etc.
 - ii. Such settlements are generally found in fertile alluvial plains and in the

northeastern states.

- 25. Important features of modern large scale manufacturing are:
 - i. Specialisation of Methods of Production: Under the craft method, only a few pieces of are made to order and hence, the cost is high but in mass production, production of large quantities of standardised parts by each worker takes place. Id leads to specialisation.
 - ii. **Mechanisation:** It refers to using gadgets which accomplish task. Its advanced stage is automation in which machines think and human being is not required anywhere.
 - iii. **Technological Innovation:** Technological innovations play an important part in modern manufacturing for quality control, eliminating waste and inefficiency and combating pollution.
 - iv. **Vast Capital:** A large amount capital is used in large scale manufacturing. It calls for heavy investment.
 - v. **Organisational Structure and Stratification:** Modern manufacturing is characterised by the following:
 - (i) A complex machine technology
 - (ii) Extreme specialisation and division of labour
 - (iii) Vast capital
 - (iv) Large organisation
 - (v) Executive bureaucracy
 - vi. **Uneven Geographical Distribution:** Major concentrations of modern manufacturing have flourished in a few places. Those nations where industries are concentrated have become economically and politically powerful. For example, 2.5 sq. km of the American com belt usually includes about four large farms employing about 10-20 workers supporting 50-100 persons. But if it were utilised for an industry, it could employ thousands of workers.

OR

Large scale manufacturing involves a large market, various raw materials, enormous energy, specialised workers, advanced technology, assembly-line mass production and large capital. This kind of manufacturing developed in the last 200 years, in the United Kingdom, north-eastern U.S.A. and Europe. Now it has diffused to almost all over the world. The features are,

- i. Access to Market: Industries are located in areas/regions which have high density of population and high purchasing power. These areas provide large market. For example;
 - (a) Industries are less in remote areas inhabited by a few people.

(b) Whereas, in developed regions of Europe, North America, Japan and Australia industries are more because they provide large global markets and the purchasing power of the people is very high.

(c) The densely populated regions of South and South-east Asia also provide large markets, thus industries are more.

ii. Access to Raw Materials: Industries are located where the raw materials is cheap and easy to transport. For example;

(a) Steel, sugar, and cement industries are based on cheap, bulky and weightlosing material (ores). Therefore, they are located close to the sources of raw materials.

(b) Agro-processing and dairy industries are located close to farms or dairy because the raw material is perishable.

- iii. Access to Labour Supply: Some industries require skilled labour. Therefore, they are located near urban-educational centres where skilled labour is easily available.
- iv. Access to Sources of Energy: Industries which use more power are located close to the source of the energy supply such as the aluminium industry.
- v. Access to Transportation and Communication Facilities: Speedy and efficient transport and communication facilities reduce the cost of transport and management. Therefore, industries are attracted in regions having good transport and communication facilities. For example; Western Europe and eastern North America have a high numbers of industries.
- vi. **Government Policy:** Governments adopt regional policies to promote balanced economic development. Hence, industries are set up on particular areas.
- vii. Access to Agglomeration Economies/Links between Industries: Many industries get benefit from nearness to a leader-industry and other industries. These benefits are termed as agglomeration economies.

Savings are derived from the linkages which exist between different industries. These factors operate together to determine industrial location.

- 26. Transport services depend on the following factors:
 - i. In selecting the mode of transport, time and cost distance, is the determining factor.
 - ii. Demand for transport is influenced by the size of population. The larger the population size, the greater is the demand for transport.
 - iii. Routes depend on:
 - (a) Location of cities, towns, villages, industrial centres and raw materials,
 - (b) Pattern of trade between them,
 - (c) Nature of the landscape between them,
 - (d) Types of climate,
 - (e) Funds available for overcoming obstacles along the length of the route
- 27. North America has the highest road density.

When the road cannot cope up with the demands of traffic, congestion occurs. Number of private as well as commercial vehicle is rapidly increasing. Construction of new roads or flyovers is not fusible to resolve this emerging traffic. Certain other things neet to be done in order to solve the problem of traffic congestions. These can be:

- i. Use of public transport instead of private transport has to be encouraged. This will certainly make the difference.
- ii. Private vehicles should have some restrictions, especially in peak hours.
- iii. Facilities in public transports should be increased so that it can attract a huge amount of commuters.

OR

The importance of communication services in the world is as follows:

- i. Communication connects the people living in different parts of the world, due to which trade is possible.
- ii. Communication through Optic Fibre Cables allows large quantities of data to be

transmitted rapidly, securely and are virtually error-free.

- iii. Communication through satellites has connected around 1000 million people in more than 100 countries.
- iv. Communication through satellites emerged as a new area in communication technology since the 1970s
- v. Cyberspace or the Internet is the latest technology for accessing information over computer networks.
- vi. New technologies have connected people and it is very easy to send or receive messages, information. This has made the concept of the global village a reality.
- 28. Effects of Air Pollution:
 - i. It causes various respiratory diseases like asthma, sore throat, sneezing, allergic rhinitis, smoky fog over the cities commonly known as smog prevails which may lead to accidents.
 - ii. Air pollution can directly contaminate the surface of bodies of water and soil. This can kill crops or reduce their yield.
 - iii. Acid rain damages plants by changing soil composition; degrades water quality in rivers, lakes and streams; damages crops; and can cause buildings and monuments to decay.
 - iv. Global warming is an environmental phenomenon caused by natural and anthropogenic air pollution. It refers to rising air and ocean temperatures around the world.
 - v. It leads to global warming which creates variation in the rhythmic cycle of seasons.
 - vi. Depletion of the ozone layer is the result of excessive chlorofluorocarbons and carbon dioxide in the atmosphere.

Measures to curb Air Pollution:

- i. Promote afforestation
- ii. Use electrical appliances with four star or five star ratings.
- iii. Use CFC
- iv. Proper chimney should be installed.
- v. By using eco- friendly products in our home.

- vi. Recycle and buy recycled products.
- vii. Support companies that are committed to sustainable manufacturing practices and reducing pollution in the air.
- viii. Support public policies and representative politicians who will work

Sources of pollution in Ganga:

- i. The river flows through 29 cities with populations over 100,000; 23 cities with populations between 50,000 and 100,000, and about 48 towns. A large proportion of the sewage water with higher organic load in the Ganges is from this population through domestic water usage.
- ii. Because of the establishment of numerous industrial cities on the bank of the Ganges like Kanpur, Prayagraj, Varanasi and Patna, countless tanneries, chemical plants, textile mills, distilleries, slaughterhouses, and hospitals prosper and grow along this and contribute to the pollution of the Ganges by dumping untreated waste into it.
- iii. During festival seasons, over 70 million people bathe in the Ganges to clean themselves from their past sins. Some materials like food, waste or leaves are left in the Ganges which are responsible for its pollution.

Sources of pollution in Yamuna:

- i. Discharge of city effluents and wastes from the burgeoning urban population and from the industrial establishments located along its banks.
- ii. Thermal power stations and municipal sewerage systems add to the pollution levels. The present sewage treatment capacity of Delhi is about 120 mgd, but the actual volume of Delhi's sewage is just double of this. This means that some 120 mgd of sewage simply goes untreated into the Yamuna.
- iii. Some of the industries that add to the pollution of the Yamuna include printing, electroplating, soap manufacture, food processing, rubber, plastics, chemicals, and leather tanning.

The polluted stretch of the river Ganga: Downstream of Kanpur, Varanasi, Farakka

barrage.

The polluted stretch of the river Yamuna: Delhi, Mathura and Agra.



- 30. i. Tokyo
 - ii. China
 - iii. Russia
 - iv. Pennsylvania
 - v. Saopaulo