# CBSE Class 12 Geography 2026 — Set 1 — Answer Key

English Medium

Time Allowed: 3 Hours

General Instructions:

1. This is an answer key — each question is shown with its correct answer and a step-by-step explanation.
2. Questions appear in the original paper order.

Q.1

Which of the following statements related to the concept of 'development' are correct ? Choose the appropriate option.

I. Development means positive change in life.

II. When positive growth is there, it is development.

III. When quantity is greater, it is development.

IV. Development is always relative to value.

(a) Only I, II and III are correct.

(b) Only I, II and IV are correct. <<

(c) Only I, III and IV are correct.

(d) Only II, III and IV are correct.

Explanation:

Development implies positive change (I), requires positive growth (II), and is always relative to value (IV).

Statement III — 'when quantity is greater, it is development' — is incorrect because development is not merely about quantity;

quality and values matter.

Hence only I, II and IV are correct — option (B).

Q.2

Match column-I with column-II correctly and choose the appropriate option:

Column-I (Approach) — Column-II (Characteristics)

a. Income Approach — i. Proposed by International Labour Organisation

b. Welfare Approach — ii. Health, education and access to resources – key factors

c. Basic Needs Approach — iii. It is one of the oldest approach

d. Capability Approach — iv. Human being – targeted beneficiaries

(a) a-ii, b-i, c-iv, d-iii

(b) a-ii, b-i, c-iii, d-iv

(c) a-iii, b-iv, c-ii, d-i

(d) a-iii, b-iv, c-i, d-ii <<

Explanation:

Income Approach is one of the oldest approaches (iii).

Welfare Approach targets human beings as beneficiaries (iv).

Basic Needs Approach was proposed by the ILO (i).

Capability Approach focuses on health, education and access to resources as key factors (ii).

Correct match: a-iii, b-iv, c-i, d-ii — option (D).

Q.3

Which one of the following is the low latitudes zone of subsistence gathering practiced in the world ?

(a) Northern Canada

(b) Northern Eurasia

(c) Southeast Asia <<

(d) Southeast Chile

Explanation:

Subsistence gathering in low latitudes (tropical zones) is mainly practiced in Southeast Asia (along with equatorial Africa and South America).

Northern Canada and Northern Eurasia are high-latitude zones.

Southeast Chile is also outside the low-latitude tropical belt.

Hence Southeast Asia — option (C).

Q.4

Choose the correct option related to oil tanker ports of the world.

(a) Maracaibo, Tripoli, Singapore

(b) Esskhira, Singapore, Manchester

(c) Maracaibo, Esskhira, Tripoli <<

(d) Manchester, Esskhira, Marmagao

Explanation:

Maracaibo (Venezuela), Esskhira (Tunisia) and Tripoli (Libya) are well-known oil tanker ports.

Manchester is an inland canal port, not an oil tanker port.

Singapore is a general/container port.
Marmagao is an iron ore port in India.
The correct set of oil tanker ports is Maracaibo, Esskhira, Tripoli — option (C).

Q.5

Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option:
Assertion (A) : All the developed countries have opened their markets for products from developing countries.
Reason (R) : World Trade Organisation deals with the global rules of trade between nations.

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true. <<

Explanation:
The Assertion is false — in reality, developed countries have not fully opened their markets for products from developing countries;
they often maintain tariff and non-tariff barriers.
The Reason is true — the WTO does deal with global rules of trade between nations.
Hence option (D): (A) is false but (R) is true.

Q.6

Read the following statements carefully regarding 'tertiary activities' and choose the correct option:
I. Tertiary activities include both production and exchange of services.
II. Tertiary activities involve the commercial output of services.
III. Tertiary activities are directly involved in the processing of raw material.
IV. The examples of tertiary activities are – plumber, doctor, publisher.

(a) Only I, II and III are correct.
(b) Only I, II and IV are correct. <<

(c) Only I, III and IV are correct.

(d) Only II, III and IV are correct.

Explanation:

Tertiary activities include both production and exchange of services (I), involve commercial output of services (II), and include plumbers, doctors and publishers as examples (IV).

Statement III is incorrect — direct processing of raw materials is a characteristic of primary/secondary activities, not tertiary.

Hence only I, II and IV — option (B).

Q.7

Choose the correctly matched pair from the following.

(a) Red collar worker – Practicing lawyers

(b) Gold collar worker – Senior business executive <<

(c) Pink collar worker – Environmental scientist

(d) White collar worker – Mining worker

Explanation:

Gold collar workers refer to highly skilled professionals such as senior business executives, doctors, and lawyers.

Red collar workers are government workers (China usage) or farm workers.

Pink collar workers are jobs historically held by women (nurses, teachers, secretaries).

White collar workers are office/professional workers, not mining workers.

Hence the correctly matched pair is Gold collar worker – Senior business executive — option (B).

Q.8

Which one of the following statements is true regarding 'medical tourism' in India ?

(a) Tourists travel specially for availing cheap medical facilities. <<

(b) Doctors travel to developed country to do surgical operation.

(c) Doctors travel to treat the patients.

(d) Tourists on trip get treated, if they fall ill.

Explanation:

Medical tourism in India refers to the phenomenon where foreigners (tourists) travel specifically to India to avail relatively cheap but high-quality medical facilities, including surgery, dental and cosmetic treatments.

Hence option (A) is correct.

Q.9

Choose the right group of states where Dravadian language is spoken majorly.

(a) Tamil Nadu, Kerala and Maharashtra

(b) Karnataka, Maharashtra and Andhra Pradesh

(c) Tamil Nadu, Kerala and Karnataka <<

(d) Andhra Pradesh, Telangana and Madhya Pradesh

Explanation:

Dravidian languages (Tamil, Malayalam, Kannada, Telugu) are spoken in the southern states.

Tamil Nadu (Tamil), Kerala (Malayalam) and Karnataka (Kannada) are the core Dravidian language states.

Maharashtra speaks Marathi (Indo-Aryan), and Madhya Pradesh speaks Hindi.

Hence option (C) is correct.

Q.10

During which one of the following phase of population growth in India, negative growth was recorded in a decade ?

(a) Phase I <<

(b) Phase II

(c) Phase III

(d) Phase IV

Explanation:

Phase I (1901–1921) is known as the period of stagnant or stationary phase of population growth in India.

During 1911–1921, there was a negative (or near-zero) growth rate due to epidemics

(influenza of 1918), famines and high death rates.
Hence option (A) — Phase I.

Q.11

Which one of the following set of cities falling on the 'Golden Quadrilateral' are arranged in a clock-wise direction from Delhi ?

(a) Delhi, Kolkata, Mumbai and Chennai
(b) Delhi, Mumbai, Kolkata and Chennai
(c) Delhi, Chennai, Mumbai and Kolkata
(d) Delhi, Kolkata, Chennai and Mumbai <<

Explanation:
The Golden Quadrilateral connects Delhi, Mumbai, Chennai and Kolkata.
Moving clockwise from Delhi: Delhi (North) →
Kolkata (East) →
Chennai (South) →
Mumbai (West) →
back to Delhi.
Hence option (D): Delhi, Kolkata, Chennai and Mumbai.

Q.12

Which one of the following cities serve as headquarter of two railway zones ?

(a) Kolkata <<
(b) Chennai
(c) Jaipur
(d) Bilaspur

Explanation:
Kolkata serves as the headquarters of two railway zones: Eastern Railway and South Eastern Railway.
Mumbai also has two (Central and Western) but is not listed here.
Hence option (A) — Kolkata.

Q.13

Which one of the following is a natural process of land degradation ?

(a) Mining activities

(b) Gully erosion <<

(c) Industrial waste

(d) Shifting cultivation

Explanation:

Gully erosion is a natural process caused by running water that cuts channels in the soil, leading to land degradation.

Mining activities, industrial waste and shifting cultivation are human-induced (anthropogenic) causes.

Hence option (B) — Gully erosion.

Q.14

The loudness of the sound is measured in the unit known as :

(a) Millimeter

(b) Centimeter

(c) Decimal

(d) Decibel <<

Explanation:

The loudness (intensity level) of sound is measured in Decibels (dB).

Millimeter and Centimeter are units of length.

'Decimal' is not a unit of measurement.

Hence option (D) — Decibel.

Q.15

Study the table of most populous countries (Sr. No., Country, Population, % of world): 1-India 1,425,775,850 (17.4%), 2-China 1,409,670,000 (17.2%), 3-USA 337,975,234 (4.13%), 4-Indonesia 278,696,200 (3.41%), 5-Pakistan 229,488,994 (2.80%), 6-Nigeria 216,746,934 (2.65%), 7-Brazil 219,277,799 (2.68%), 8-Bangladesh 168,220,000 (2.06%), 9-Mexico 128,271,248

(1.57%). How many of the listed countries fall under Asian continent ?

(a) 3

(b) 4

(c) 5 <<

(d) 6

Explanation:

Asian countries in the table: India (1), China (2), Indonesia (4), Pakistan (5), Bangladesh (8) = 5 countries.

USA is in North America, Nigeria in Africa, Brazil in South America, Mexico in North America.

Hence 5 countries — option (C).

Q.16

Study the table of most populous countries. Which of the following set of continents is not represented in the table ? Choose the most appropriate option.

(a) Australia and Africa

(b) Africa and South America

(c) Europe and South America

(d) Australia and Europe <<

Explanation:

In the table: Africa is represented by Nigeria (6);

South America is represented by Brazil (7).

Australia and Europe are not represented at all.

Hence the set of continents NOT represented is Australia and Europe — option (D).

Q.17

Study the table of most populous countries. China and Brazil together account for what percentage of the world population ?

(a) 17.88

(b) 17.58

(c) 19.88 <<

(d) 19.58

Explanation:

China = 17.2%, Brazil = 2.68%.

Together = 17.2 + 2.68 = 19.88%.

Hence option (C) — 19.88.

Q.18

(Source-based: Map of areas of extensive commercial grains farming)

(18.1) Write the geographical name of the area marked as A.

Answer: The area marked A is the Prairie region (the Great Plains / Prairies of North America — Canada and the United States).

Explanation:

The map shows areas of extensive commercial grain farming.

The region marked A in North America corresponds to the Prairies (Great Plains) of Canada and the USA, which are among the world's most important regions for commercial wheat farming.

Q.19

(Source-based: Map of areas of extensive commercial grains farming)

(18.2) Name any two major crops grown in the region A.

Answer: Wheat and Maize (Corn).

Explanation:

The Prairie/Great Plains region (area A) is famous primarily for wheat cultivation (both spring and winter wheat).

Maize (corn) is also extensively grown in parts of this region (especially the US Corn Belt).

These are the two principal commercial grain crops of the area.

Q.0

(Source-based: Map of areas of extensive commercial grains farming)

(18.3) Explain the agricultural importance of the area marked as B.

Answer: Area B represents the Pampas of South America (Argentina and Uruguay), which is an important region of extensive commercial grain farming and livestock rearing. The Pampas have fertile soils, favourable climate and large mechanised farms that produce wheat and maize for export, making them highly significant in world agriculture.

Explanation:

The Pampas (area B) in South America are known for extensive temperate grasslands used for commercial grain farming (wheat) and cattle ranching.

The region contributes significantly to global grain and beef exports.

Q.0

(Visually Impaired alternative to Q.18) Explain the main characteristics of 'extensive commercial grain farming' in the world.

Answer: Extensive commercial grain farming is practised on large mechanised farms in mid-latitude grasslands. Key characteristics: (1) Large farm size — farms cover hundreds to thousands of hectares. (2) High degree of mechanisation — tractors, harvesters, combines are used. (3) Low labour per unit area. (4) Low yield per hectare but high total output due to large farm size. (5) Main crops: wheat and maize. (6) Located in Prairies (North America), Pampas (South America), Steppes (Eurasia), Veldts (South Africa), and Downs (Australia). (7) Surplus production is exported.

Explanation:

Extensive commercial grain farming is characterised by large mechanised farms in temperate grassland regions that produce grains (mainly wheat) for commercial sale and export, with low inputs per unit area but high absolute output.

Q.0

(Source-based: Passage on Water Pollution)

(19.1) Explain how industries are the major contributor of water pollution in

India.

Answer: Industries produce large quantities of undesirable products including industrial wastes, polluted waste water, poisonous gases, chemical residuals, heavy metals, dust and smoke. Most industrial wastes are disposed of directly into running water bodies or lakes. Poisonous elements thereby reach rivers, reservoirs and other water bodies, destroying the bio-system. Major water-polluting industries include leather, pulp and paper, textiles and chemicals.

Explanation:

The passage directly states that industrial wastes (chemical residuals, heavy metals, poisonous gases, polluted wastewater) are discharged into water bodies, making industries the major source of water pollution.

Q.0

(Source-based: Passage on Water Pollution)

(19.2) Suggest the way for minimising water pollution.

Answer: Ways to minimise water pollution: (1) Treatment of industrial effluents before discharge — setting up effluent treatment plants (ETPs). (2) Enforce strict pollution control laws and standards. (3) Promote recycling and reuse of industrial water. (4) Educate industries and communities about waste disposal. (5) Use of cleaner production technologies that generate less waste.

Explanation:

Minimising water pollution requires a combination of technological solutions (effluent treatment), regulatory measures (environmental laws), and behavioural changes (responsible disposal).

Q.0

(Source-based: Passage on Water Pollution)

(19.3) Mention two rivers of India which are highly polluted.

Answer: Ganga and Yamuna.

Explanation:

The Ganga and Yamuna are among the most polluted rivers in India, receiving industrial effluents, sewage, and agricultural run-off from numerous cities and industries along their banks.

Q.20

Examine the relationships between the 'unresting man' and 'unstable earth'.

Answer: • Ellen C. Semple defined human geography as 'the study of the changing relationship between the unresting man and the unstable earth' — both are dynamic.

• Nature (the unstable earth) keeps changing and sets limits/opportunities; man (unresting) keeps interacting with it and modifies it through technology.

• The relationship has changed over time: environmental determinism (naturalisation of humans) → possibilism (humanisation of nature) → neo-determinism ('stop and go').

• This mutual interaction creates the cultural landscape, so human geography studies the inter-relationship between the physical and the socio-cultural environment.

Explanation:

NCERT Class 12 Fundamentals of Human Geography, Ch 1 'Human Geography: Nature and Scope'.

Semple's definition stresses that the relationship is dynamic on both sides: the earth changes, and humans with growing technology constantly reshape their interaction with it — from being dominated by nature (determinism), to modifying it (possibilism), to working within its limits (Griffith Taylor's neo-determinism).

Q.21

Examine the importance of 'sustainability' as a pillar of 'human development'.

Answer: Sustainability as a pillar of human development means ensuring that the level of development achieved today is maintained and available for future generations. Its importance includes: (1) Intergenerational equity — natural

resources must not be depleted beyond their regeneration capacity. (2) Environmental protection — sustainable development prevents ecological degradation. (3) Long-term well-being — it ensures that economic growth, social progress and environmental health are maintained simultaneously. (4) It guards against resource exhaustion — if natural resources are over-exploited, future generations will have reduced opportunities. (5) It is one of the four pillars of Human Development (along with equity, productivity and empowerment) as outlined by UNDP.

Explanation:

According to UNDP's Human Development paradigm, sustainability is essential to ensure that development opportunities available to present generations are not denied to future generations.

It links development to environmental stewardship.

Q.22(a)

(a) Explain the main characteristics of urban settlements in India.

Answer: Main characteristics of urban settlements in India: (1) Population size — towns have a minimum population of 5,000 (Census of India criterion) and cities are larger. (2) Occupation — majority (75%) of the male working population is engaged in non-agricultural activities. (3) High population density — urban areas have dense population due to concentration of economic activities. (4) Functional diversity — urban settlements perform multiple functions: trade, commerce, administration, education, manufacturing. (5) Planned layout — modern urban settlements have planned roads, drainage and utilities, unlike rural areas. (6) Social heterogeneity — urban areas have diverse populations in terms of culture, language and religion. (7) Administrative status — the Census of India uses statutory towns and census towns as categories.

Explanation:

Urban settlements in India are defined by the Census of India based on population size, density, and the proportion of the population engaged in non-agricultural

activities.

Q.22(b)

(b) Explain the evolution of towns in India.

Answer: Evolution of towns in India: (1) Ancient period — India had towns dating back to the Indus Valley Civilisation (Harappa, Mohenjo-daro). Towns also developed during the Vedic and Mauryan periods (Pataliputra, Taxila). (2) Medieval period — towns grew around forts, temples and trading centres during the Mughal era (Agra, Delhi, Lahore). (3) Colonial period — the British established port towns (Mumbai, Kolkata, Chennai) as administrative and commercial centres. Railway junctions also led to new towns (Kanpur, Jamshedpur). (4) Post-independence — industrial towns (Bhilai, Durgapur, Rourkela), administrative towns (Chandigarh, Gandhinagar, Bhubaneswar) and mining towns emerged. (5) Present — rapid urbanisation has led to the growth of metropolitan cities and mega cities.

Explanation:

India's urban history spans thousands of years, from Indus Valley cities to modern planned industrial and administrative towns.

Each historical period contributed a distinct type of urban settlement.

OR

Q.22(b)

OR — (This is the OR variant for Q.22) Same as Q.22(b): Explain the evolution of towns in India.

Answer: See Q.22(b) — Explain the evolution of towns in India.

Explanation:

Q.22 provides an internal choice between (a) characteristics of urban settlements and (b) evolution of towns in India.

The OR label in the paper separates these two alternatives.

Q.0

Study the table of Sectoral composition of workforce in India, 2011 (Primary: 26,30,22,473 persons / 54.6% / Male 16,54,47,075 / Female 9,75,75,398; Secondary: 1,83,36,307 / 3.8% / Male 97,75,635 / Female 85,60,672; Tertiary: 20,03,84,531 / 41.6% / Male 15,66,43,220 / Female 4,37,41,311).

(23.1) Why is the large difference between primary and tertiary categories of female workers ?

Answer: The large difference in female workers between the primary sector (9.75 crore) and tertiary sector (4.37 crore) is due to: (1) Education and skill levels — most rural women have low levels of education and are engaged in subsistence farming and agricultural labour in the primary sector. (2) Urban-rural divide — tertiary sector jobs are concentrated in urban areas, where female participation is lower due to social and mobility constraints. (3) Social and cultural factors — cultural norms in rural India restrict women's mobility to urban workplaces. (4) Nature of work — agricultural tasks in the primary sector, though often unrecognised and unpaid, are included in Census counts of workers, inflating primary female numbers.

Explanation:

The primary sector dominates female employment because most women workers in India are rural agricultural labourers, while tertiary sector employment requires education and urban proximity that many women lack.

Q.0

(23.2) Explain the reason of low variation between male workers of 'primary' and 'tertiary' sectors.

Answer: The variation between male workers in primary (16.54 crore) and tertiary (15.66 crore) sectors is relatively low compared to female workers because: (1) Male workers have higher mobility and access to education, allowing them to move between rural agricultural and urban service sector jobs. (2) India's economy was transitioning in 2011, with a significant portion of educated urban

men employed in the growing service (tertiary) sector. (3) Rural male workers who have moved to cities for non-farm employment swell the tertiary numbers. (4) Both sectors are sizeable employers of male labour, reflecting the dual nature of India's economy — large rural agricultural base alongside a growing urban services sector.

Explanation:

The near-parity between primary and tertiary male workers reflects the transition of India's economy from agriculture-based to services-based, with men having greater mobility to shift across sectors compared to women.

Q.0

(23.3) Why 'secondary sector' has low contribution in India's workforce ?

Answer: The secondary sector contributes only 3.8% of India's workforce (2011) because: (1) Limited industrialisation — India's manufacturing sector is not as developed as in countries like China or Germany; most manufacturing is in the informal/small-scale sector. (2) Low capital investment — inadequate investment in large-scale industries limits job creation. (3) Skill gap — the workforce lacks the technical skills required for modern manufacturing. (4) Predominance of agriculture — a large share of the workforce remains in the primary sector, slowing the transition to manufacturing. (5) Infrastructure constraints — inadequate power, roads and logistics hamper industrial growth. (6) Competition from imports — cheap imports discourage domestic manufacturing expansion.

Explanation:

India's secondary (manufacturing) sector employs a disproportionately small share of the workforce due to limited industrialisation, skill gaps and infrastructure constraints, unlike developed economies where manufacturing drives employment.

Q.24

"Industries should be located at points where the production costs are minimum." Examine the statement with suitable arguments.

Answer: The statement refers to Alfred Weber's Least Cost Theory of industrial location. Arguments supporting it: (1) Raw material costs — industries should locate near raw material sources to minimise transport costs, especially for weight-losing industries (e.g., steel plants near iron ore mines). (2) Labour costs — if labour costs are low enough at a location, industries may shift there even if transport costs are higher (e.g., textile industries in low-wage countries). (3) Agglomeration economies — industries cluster together to share infrastructure, services and skilled labour, reducing costs. (4) Transport costs — minimised by locating between raw materials and markets; the point of minimum transport cost is the optimal location. (5) Energy costs — industries requiring large amounts of power (aluminium smelting) locate near cheap energy sources. (6) Market proximity — for perishable goods or weight-gaining industries (e.g., bakeries, breweries), location near markets reduces distribution costs. Thus, minimum production cost is achieved by balancing transport, labour, energy and agglomeration factors.

Explanation:

Weber's theory argues that the optimal industrial location is where total production costs (transport + labour + agglomeration/deglomeration) are minimised.

Weight-losing industries locate near raw materials;

weight-gaining industries locate near markets;

labour-intensive industries locate near cheap labour pools.

Q.25(a)

(a) "Railway is the mode of land transport for bulky goods and passengers over long distances." In the context of this statement, explain the significance of railways in the world.

Answer: Significance of railways in the world: (1) Transport of bulky goods — railways are the most cost-effective mode for transporting heavy, bulky commodities like coal, iron ore, timber and grains over long distances. (2) Passenger transport — railways connect cities, towns and rural areas, carrying millions of passengers daily at relatively low cost. (3) Economic development —

railways open up hinterlands, facilitate trade and commerce, and enable industrial growth by linking production centres to markets. (4) Employment generation — railway networks provide direct and indirect employment to millions. (5) Integration of regions — railways integrate far-flung regions of a country, promoting national unity and regional development (e.g., Trans-Siberian Railway integrating Russia). (6) Energy efficiency — railways are more energy-efficient and environmentally sustainable than road transport for bulk haulage. (7) High-speed connectivity — modern high-speed rail (Bullet trains in Japan, TGV in France) has revolutionised inter-city travel. (8) Reduces road congestion — shifting freight and passengers to rail reduces pressure on road networks.

Explanation:

Railways remain the backbone of land transport for long-distance bulk freight and mass passenger movement globally, underpinning economic integration and regional development.

Q.25(b)

OR (b) "Road transport is the most economical for short distances compared to railway." In the context of this statement, explain the significance of road transport in the world.

Answer: Significance of road transport in the world: (1) Door-to-door service — roads provide direct connectivity between origin and destination, which railways cannot, making them ideal for short-distance movement of goods and passengers. (2) Flexibility — motor vehicles can reach remote areas inaccessible to railways, connecting villages, hills and interiors. (3) Short distances and perishables — for perishable goods (vegetables, fruits, dairy), road transport is faster and more cost-effective than rail for short hauls. (4) Feeder to other modes — roads act as feeders to railway stations, airports and seaports, completing the transport chain. (5) Economic for small loads — road transport is more economical for small consignments that do not justify a full railway wagon. (6) Employment and economic activity — road transport is a major employer (drivers, mechanics,

logistics) and enables trade at local and regional scales. (7) Tourism and rural connectivity — roads connect tourist destinations and remote agricultural areas to markets. (8) Infrastructure across terrains — roads can be built over varied terrain (mountains, plains, forests) with less capital than railways.

Explanation:

Road transport's flexibility, door-to-door reach and economy at short distances make it the most widely used mode of transport worldwide, complementing railways and other modes.

OR

Q.25(b)

OR variant marker for Q.25 — (b) Road transport significance (same as q025b above).

Answer: See q025b — significance of road transport in the world.

Explanation:

Q.25 provides internal choice between (a) railways and (b) road transport significance.

Q.26(a)

(a) "Generally land-use in a region is influenced by the nature of economic activities." Support the statement with suitable examples.

Answer: Land-use is shaped by economic activities: (1) Agriculture — in rural and fertile regions, land is predominantly used for crop cultivation (e.g., Punjab and Haryana for wheat and rice, Deccan Plateau for cotton). (2) Pastoralism — in semi-arid and grassland regions (Rajasthan, central Australia), land is used for grazing livestock rather than crop farming. (3) Forestry — in regions with thick forests (northeastern India, Amazon), land use is dominated by forestry activities. (4) Mining — mineral-rich regions have land used for quarrying and mining (Jharkhand for coal and iron ore, Rajasthan for marble). (5) Urbanisation and industry — in economically advanced areas and near transport corridors, agricultural land is converted to industrial and urban land use (Mumbai

Metropolitan Region, Delhi NCR). (6) Tourism — scenic areas develop land for hotels, resorts and recreational facilities (Himachal Pradesh, Kerala). Thus, the dominant economic activity of a region determines its land-use pattern.

Explanation:

Land-use patterns are a direct reflection of the economic activities that are most productive and profitable in a given region's physical and human geography.

Q.26(b)

OR (b) "The Indian agricultural problems have physical constraints and institutional hindrances." Support the statement with suitable examples.

Answer: Physical constraints: (1) Unreliable rainfall — dependence on monsoon makes agriculture unpredictable; droughts in Rajasthan and floods in Assam cause crop failures. (2) Soil degradation — waterlogging, salinity and soil erosion (especially in Punjab and UP) reduce fertility. (3) Topography — hilly and mountainous terrain (Northeast, Himalayas) limits cultivation. (4) Fragmented small landholdings — a large number of small farmers till tiny plots inefficiently. Institutional hindrances: (5) Land tenure and tenancy issues — sharecropping and insecure tenure discourage farmers from investing in land improvement. (6) Inadequate credit — small farmers rely on moneylenders at high interest rates; institutional credit from banks remains insufficient. (7) Poor market linkages — lack of proper storage, cold chains and market infrastructure leads to post-harvest losses and low prices for farmers. (8) Inadequate irrigation infrastructure — only about 45–50% of cultivated area is irrigated. (9) Lack of agricultural extension services — farmers lack access to modern technology and practices. (10) Land fragmentation through inheritance laws leads to economically unviable small holdings.

Explanation:

Indian agriculture faces a dual challenge: the physical environment imposes natural limitations, while institutional weaknesses in credit, land tenure, markets and extension services further constrain agricultural productivity.

OR

Q.26(b)

OR variant marker for Q.26 — (b) Indian agricultural problems (same as q026b above).

Answer: See q026b — Indian agricultural problems have physical constraints and institutional hindrances.

Explanation:

Q.26 provides internal choice between (a) land-use influenced by economic activities and (b) Indian agricultural problems.

Q.27(a)

(a) Explain the significance of petroleum as major source of energy and describe its distribution in India. (3+2=5)

Answer: Significance of petroleum (3 marks): (1) Versatile fuel — petroleum provides fuels for transport (petrol, diesel), aviation (jet fuel), heating and cooking (kerosene, LPG). (2) Raw material for industries — petrochemicals derived from petroleum are used in plastics, synthetic fibres, fertilisers, pharmaceuticals and paints. (3) High energy density — petroleum has a very high calorific value per unit weight, making it an efficient fuel. (4) Economic importance — petroleum exports/refining are major contributors to GDP and government revenue. (5) Strategic importance — countries with petroleum reserves wield significant geopolitical influence.

Distribution in India (2 marks): (1) Mumbai High (offshore, Arabian Sea) — the largest producing oil field in India. (2) Assam fields — Digboi (oldest oil field in Asia), Naharkatiya, Moran. (3) Gujarat — Ankleshwar, Kalol, Mehsana. (4) Rajasthan — Barmer–Sanchore basin (significant recent finds). (5) Krishna–Godavari basin (offshore, east coast).

Explanation:

Petroleum is India's most critical energy resource, central to transport, industry and economic growth.

Mumbai High is the dominant producing region;

Assam is the oldest;

Gujarat and Rajasthan are growing contributors.

Q.27(b)

OR (b) Explain the significance of iron-ore as industrial raw material and describe its distribution in India. (3+2=5)

Answer: Significance of iron ore (3 marks): (1) Foundation of the steel industry — iron ore is the primary raw material for pig iron and steel production, which is the backbone of modern industry. (2) Enables heavy industry — steel produced from iron ore is used in construction, machinery, railways, shipbuilding and automobiles. (3) Economic importance — iron ore mining and steel making generate employment and contribute to industrial GDP. (4) Export earnings — India is a major exporter of iron ore, earning significant foreign exchange. (5) National infrastructure — steel derived from iron ore is essential for bridges, buildings, dams and defence equipment.

Distribution in India (2 marks): (1) Jharkhand — Singbhum (Noamundi, Gua mines) is the richest iron ore belt. (2) Odisha — Keonjhar, Sundargarh and Mayurbhanj districts. (3) Chhattisgarh — Bailadila (Dantewada), one of the highest-grade ore deposits in the world. (4) Goa — formerly a major exporter (now partially restricted). (5) Karnataka — Kudremukh, Bellary–Hospet region.

Explanation:

Iron ore is critical to India's industrialisation.

The Jharkhand–Odisha–Chhattisgarh belt holds the bulk of India's reserves, while Karnataka and Goa also have significant deposits.

OR

Q.27(b)

OR variant marker for Q.27 — (b) Iron ore significance and distribution (same as q027b above).

Answer: See q027b — significance of iron ore and its distribution in India.

Explanation:

Q.27 provides internal choice between (a) petroleum and (b) iron ore.

Q.28(a)

(a) Analyse the importance of Indian seaports in the development of international trade.

Answer: Importance of Indian seaports in international trade: (1) Gateways of trade — India has 13 major ports and about 200 minor/intermediate ports that handle over 95% of India's foreign trade by volume. (2) Mumbai Port and Jawaharlal Nehru Port (JNPT), Mumbai — together handle the largest share of India's container traffic; Mumbai is India's leading port in terms of value of trade. (3) Chennai Port — major port on the east coast for container traffic and automobiles. (4) Kandla Port — important for petroleum and fertiliser imports; serves the hinterland of Gujarat and Rajasthan. (5) Kolkata-Haldia Port — serves the Gangetic hinterland (coal, jute, steel). (6) Visakhapatnam — deep-water port handling bulk cargo (iron ore, coal, petroleum). (7) Paradip (Odisha) — handles iron ore exports. (8) Mangalore — handles petroleum products and fertilisers. Ports reduce transport costs, enable bulk movement of goods, attract FDI, create employment in logistics and processing zones (SEZs), and integrate India into global supply chains.

Explanation:

India's seaports are the lifeline of its international trade, handling the overwhelming bulk of trade by volume.

Each major port specialises in specific commodities and serves a distinct hinterland.

Q.28(b)

OR (b) Analyse the changing pattern of India's international trade.

Answer: Changing pattern of India's international trade: (1) Direction of trade — post-independence, India traded mainly with the UK and Commonwealth countries. After liberalisation (1991), trade diversified to USA, EU, China, ASEAN, West Asia and Africa. (2) Composition of exports — shift from primary goods (jute, cotton, tea) to manufactured goods (engineering products, chemicals, textiles, gems and jewellery) and services (software, IT-enabled services). (3) Composition of imports — petroleum products remain the largest import; machinery, fertilisers, gold and electronic goods are also major imports. (4) Trade deficit — India consistently runs a trade deficit (imports > exports) because petroleum imports are very large. (5) Growth of trade — India's total trade (exports + imports) has grown enormously post-liberalisation, reflecting greater integration with the world economy. (6) Emergence of new trading partners — China has become India's largest trading partner by volume; Gulf countries are major export destinations for labour and services. (7) Services trade — India has a surplus in services trade (IT, BPO, tourism), partially offsetting the merchandise trade deficit.

Explanation:

India's international trade has transformed from a primary-goods-exporting, UK-oriented economy to a diversified merchandise and services trader integrated with global markets, though a persistent trade deficit driven by petroleum imports remains a challenge.

OR

Q.28(b)

OR variant marker for Q.28 — (b) Changing pattern of India's international trade (same as q028b above).

Answer: See q028b — changing pattern of India's international trade.

Explanation:

Q.28 provides internal choice between (a) seaports and (b) changing pattern of international trade.

Q.29

In the given political outline map of the world, seven geographical features have been marked as A, B, C, D, E, F and G. Identify any five of them with the help of following information and write their correct names on the lines drawn near them:

A. A terminal station of Trans-Siberian Railway

B. A major sea port

C. A major air port

D. An international shipping canal

E. An area of 'subsistence gathering'

F. An area of 'commercial livestock rearing'

G. An area of 'dairy farming'

Answer: A = Vladivostok (eastern terminal of Trans-Siberian Railway, Pacific coast of Russia — appears on left in Atlantic-centered projection); B = Valparaíso / Callao (major seaport on western coast of South America); C = Nairobi (major international airport — Jomo Kenyatta International, Kenya, East Africa); D = Panama Canal (international shipping canal joining Pacific and Atlantic Oceans, Central American isthmus); E = Congo Basin / Zaire Basin (area of subsistence gathering, Central Africa — hatched region); F = Pampas, Argentina (area of commercial livestock rearing, southern South America — hatched region); G = North-Western Europe / Denmark–Netherlands region (area of dairy farming — gray shaded, upper-right of map near Scandinavia)

Explanation:

World outline map read from p021 (Atlantic-centered oval projection, Americas on left, Europe/Africa center, Asia/Australia right).

A: left-side Pacific coast with island cluster = Vladivostok (Russian Far East, eastern Trans-Siberian terminal).

B: dot on Pacific/western coast of South America, south of Panama = Valparaíso or Callao.

C: center-right with vertical arrow from map top pointing to East Africa zone = Nairobi airport.

D: narrow land-bridge between N and S America = Panama Canal isthmus.

E: hatched region in center-left = Congo Basin (Central Africa).

F: hatched region at base of South America = Pampas (Argentina).

G: gray-shaded area upper-right near Scandinavian/NW European coast = NW Europe dairy belt.

Cross-verified against the Visually Impaired sub-questions (29.1–29.7) which confirm: western terminal=St.

Petersburg/Moscow (not on map as a separate mark — A is the eastern terminal Vladivostok), seaport=western SA coast, airport=Kenya, canal=Panama, subsistence gathering=Africa, livestock=USA Great Plains, dairy=North America Great Lakes.

Note: map F is in South America (Pampas) not USA;

the VI clue says USA Great Plains — this may indicate the map has both a South American and a North American livestock marker, but the visible F circle is at Pampas position.

G's position in NW Europe is consistent with dairy farming (Denmark, Netherlands are world-leading dairy countries).

Q.0

(Visually Impaired alternative to Q.29 — Attempt any five)

29.1 Name the westernmost terminal station of Trans-Siberian Railway.

29.2 Mention a major sea port on the western coast of South America.

29.3 Mention an international airport of Kenya.

29.4 Name the shipping canal joining Pacific and Atlantic Oceans.

29.5 Mention one major region of 'subsistence gathering' in Africa.

29.6 Name a major area of 'commercial livestock rearing' in United States of America.

29.7 Name the major area of 'dairy farming' in North America.

Answer: 29.1 St. Petersburg (or Chelyabinsk is the starting point in some references; the westernmost terminal is Moscow/St. Petersburg).

29.2 Valparaíso (Chile) or Callao (Peru).

29.3 Jomo Kenyatta International Airport, Nairobi.

29.4 Panama Canal.

29.5 Congo Basin (Democratic Republic of Congo) / Zaire Basin.

29.6 The Great Plains / Corn Belt region (e.g., Kansas, Nebraska, Texas for cattle ranching).

29.7 Great Lakes region / St. Lawrence Lowlands (e.g., Wisconsin, Michigan) or New England.

Explanation:

These are factual geography questions about transport routes, ports, airports, canals and agricultural regions for visually impaired candidates who cannot interpret the map.

Q.30

On the given political outline map of India, locate and label any five of the following seven geographical features with appropriate symbols:

30.1 A state with the highest density of population (2011).

30.2 A state leading in the production of tea.

30.3 An iron-ore mining area in southern Chhattisgarh.

30.4 A major area of bauxite mining in Odisha.

30.5 An oil refinery in Uttar Pradesh.

30.6 A major seaport located at the head of Gulf of Kuchchh.

30.7 An international airport in Punjab.

Answer: 30.1 West Bengal (highest population density: 1,029 persons/sq km, Census 2011).

30.2 Assam (leading tea-producing state).

30.3 Bailadila / Dantewada (iron-ore mining area in southern Chhattisgarh).

30.4 Kalahandi / Koraput / Sambalpur region (bauxite mining in Odisha).

30.5 Mathura oil refinery (Uttar Pradesh).

30.6 Kandla Port (located at the head of Gulf of Kachchh, Gujarat).

30.7 Sri Guru Ram Dass Jee International Airport, Amritsar (Punjab).

Explanation:

Map-based question for India.

Key facts: West Bengal has the highest population density (2011);

Assam leads tea production;

Bailadila (Dantewada, southern Chhattisgarh) is the iron ore mining area;

Mathura is the oil refinery in UP;

Kandla is the seaport at the head of the Gulf of Kachchh;

Amritsar has the international airport in Punjab.

Q.0

(Visually Impaired alternative to Q.30 — Attempt any five)

30.1 Name the state with the highest density of population (2011).

30.2 Which state is leading in tea production ?

30.3 Name any one iron-ore mining area in Chhattisgarh.

30.4 Mention one bauxite mining area in Odisha.

30.5 Name the place where oil refinery is located in Uttar Pradesh.

30.6 Name the major sea port located on the head of Gulf of Kuchchh.

30.7 Name the place where an international airport is located in Punjab.

Answer: 30.1 West Bengal.

30.2 Assam.

30.3 Bailadila (Dantewada).

30.4 Kalahandi (or Koraput / Sambalpur).

30.5 Mathura.

30.6 Kandla.

30.7 Amritsar.

Explanation:

These are the text-form answers for the visually impaired candidates corresponding to the map-based Q.30 items.