

Past-paper walk-through

Changes as a Result of the World Economy ■ 7.7

eXercise

Questions in this set

- 2025 Set 1 Q1
- 2023 Set 1 Q3

Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- **//** separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = “or words to that effect” – the wording need not match.

Question 1

2025 Set 1 ■ Q1

The European Union (EU) and Association of Southeast Asian Nations (ASEAN) are supranational organizations composed of independent member states.

- (a) Define the concept of an independent state.
- (b) Describe one purpose of supranational organizations.
- (c) Describe one global outcome of an increase in international trade.
- (d) Explain how deindustrialization has affected the economy of core countries.
- (e) Explain why international boundaries on land or at sea may lead to disputes over resources.
- (f) Explain how supranational organizations such as the EU or ASEAN may challenge the sovereignty of member states.

Question 1

(g) Explain how advances in communication technologies may affect state sovereignty.
4 Japan Population Pyramid, 2021 Source: United States Census Bureau International Database

Solution 1

(a)

Mark scheme

- - The primary building block of the world political map.
- - A sovereign country, sovereign state, or a political entity with its own independent government (governs itself autonomously and is not controlled by any other external power).
- - A country with control over its own territory or laws, and/or a country that is recognized by other states.

Solution 1

(b) Mark scheme

- - To address transnational or environmental challenges, and/or to create economies of scale, trade agreements, and/or military alliances.
- - To align member states (countries) that have a common interest or objective (e.g., administrative, economic, environmental, military, strategic, peace, security).
- - To create free trade zones, cartels, lending agencies, and/or research institutions.
- - To reduce the operational cost of governance, regulation, tariffs, business operations, currency exchange, banking fees and/or legal expenses.
- - To increase regional or organizational economic power, productivity (e.g., gross national product), and/or size of the available labor force.

Solution 1

(c) Mark scheme

- - An increase in international trade allows countries to use comparative advantage and/or complementarity to specialize in the production of goods and/or services.
- - Increase in globalization, free trade, trade agreements, interdependence, supranational organizations, and/or rising levels of international development.
- - Outsourcing of jobs from countries with higher labor costs to countries with lower labor costs and/or increased competition between countries.
- - Deindustrialization in more developed/core countries or regions.
- - Improved or expanded infrastructure (e.g., port facilities, warehouses, roads, transportation networks).

Solution 1

- - Increased pollution, use of natural resources, and/or environmental impacts.
- - New manufacturing zones, free trade zones, special economic zones, and/or export processing zones.
- - Changes in the economic sectors of national economies and/or changes in methods of production.
- - Increased potential for supply chain problems (e.g., halted production, delayed shipment, tariffs, trade restrictions, labor shortages, quality control issues, technological integration, sustainability pressures, cost increases).
- - Wider access to more diverse goods, services, technology, media, and/or ideas.
- - Lower production costs and/or prices for consumers.

Solution 1

(d) Mark scheme

- - Economies have shifted away from manufacturing toward services and technology as the main sources of economic production.
- - The loss of manufacturing businesses and/or jobs resulted in widespread unemployment, economic decline, and/or less business investment.
- - Deindustrialization has contributed to an international division of labor and/or an economic sector shift in which core countries have higher-paying jobs.
- - Outsourcing, offshoring, and/or economic restructuring have led to a decline in jobs in core countries and an increase in jobs in newly industrialized countries (developing countries, semiperiphery).

Solution 1

- - Core countries and/or cities have developed strategies designed to attract new businesses to replace those lost from deindustrialization (e.g., lower taxes for businesses that relocate).

Solution 1

(e)

Mark scheme

- - Boundaries may be contested due to more than one country or company claiming ownership over a resource.
- - Countries may disagree with international agreements that define the rights and responsibilities of countries (e.g., United Nations Convention on the Law of the Sea [UNCLOS]).
- - Political boundaries may be superimposed over resource areas claimed by different countries.
- - Corporations, indigenous groups, and/or local communities may have competing claims to resources.

Solution 1

(f)

Mark scheme

- - Supranational organizations implement international laws or policies that may result in limitations on the economic or political actions of individual member states.
- - Supranational organizations may require participation in military alliances or impose changes in regional governance (e.g., border policies, currencies, trade regulations, environmental regulations, labor regulations, taxes, judicial systems) that replace or supersede existing systems of national government in member states.

Solution 1

(g) Mark scheme

- - Advances in technology may affect state sovereignty by facilitating devolution, supranationalism, and/or democratization efforts that change the structure of the state or its system of governance.
- - Advances in technology may affect state sovereignty by allowing people, social movements, and/or organizations (e.g., other governments, corporations) to communicate faster or more effectively, or to a larger audience, about political issues and/or social justice, leading to changes in law, government policy, strengthening of the state, and/or the devolution of the state.

Solution 1

- - Advances in technology may affect state sovereignty by increasing the ability of a supranational organization to monitor what is occurring in member states (e.g., upholding agreements and enforcing regulations).

Question 3

2023 Set 1 ■ Q3

Two stimuli.

Stimulus 1 (map): MAJOR MEDICAL AND BIOTECHNOLOGY COMPANIES AND INSTITUTIONS IN THE BOSTON AND PROVIDENCE REGION. An inset map shows the downtown areas of Boston and Cambridge, Massachusetts, with numerous medical and biotechnology companies and institutions clustered together along the Charles River and arterial routes. Source: National Institutes of Health.

Stimulus 2 (table): SELECTED TECHNOLOGY RESEARCH AND DEVELOPMENT AREAS IN THE MEDICAL FIELD.

Category	Product or Service
Biotechnology	Genetic engineering research; Biochemistry research; Diagnostic and testing science
Gene therapies	Cancer treatments; Neurological treatments; Rare and genetic disease treatments; Antiviral treatments and vaccines (e.g., Moderna)

Question 3

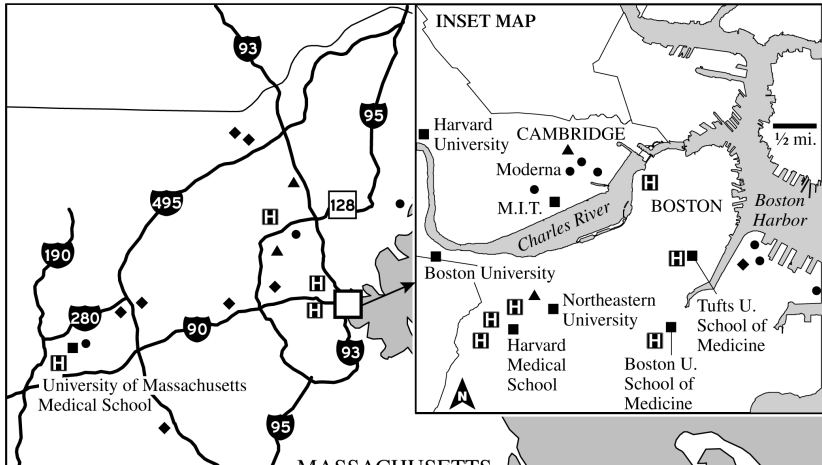
Since the 1980s, the northeastern United States has developed into a major global center of high-technology industry that specializes in the medical field.

- (a) Describe the spatial pattern of the companies and institutions shown in the inset map.
- (b) Describe the concept of a growth pole.
- (c) Explain ONE way education infrastructure affects a region's potential for high-technology development.
- (d) Explain how the pattern shown on the map resembles the galactic city model.
- (e) Explain ONE way local economic changes may be a result of deindustrialization.
- (f) Explain how the products and services listed in the table demonstrate that this economy has moved into the quaternary sector.

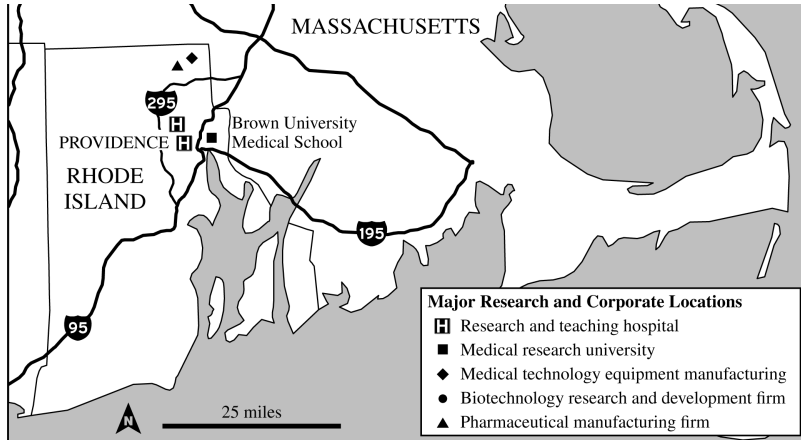
Question 3

(g) The map focuses on a regional scale. Explain a possible limitation of drawing country scale conclusions from a regional scale map.

Question 3



Question 3



Source: National Institutes of Health

The following table shows the number of research and corporate locations in Providence, Rhode Island.

Solution 3

(a)

Mark scheme

- Describe the spatial pattern on the inset map (1 point) — accept any: agglomeration of similar economic activities; clustering/concentration of similar activities; concentration along transportation routes (rivers, arterial roads); a concentration of similar economic activities within a metropolitan area in Massachusetts.

Solution 3

(b)

Mark scheme

- Describe a growth pole (1 point) — accept any: a location where research, development, and/or innovation generates new products or services; an institution (university, hospital, laboratory) whose discoveries/inventions create new economic opportunities; an area where new businesses start up or locate to join an emerging market or attract investment; an area attracting businesses seeking a specialized/educated labor pool; an area designated by government to facilitate economic activity for a specific purpose.

Solution 3

(c) Mark scheme

- Explain ONE way education infrastructure affects high-technology potential (1 point) — accept any: graduates who stay in the region promote development, create innovative products, and provide wealth for investment; educational institutions build a specialized labor force that attracts high-tech firms/investors; institutions sponsor research yielding new products/services, value, investment, and employment; public investment in specialized training/infrastructure (positive), or, conversely, lack of educational infrastructure hurts potential by leaving no highly educated/specialized workforce or sponsored research.

Solution 3

(d)

Mark scheme

- Explain resemblance to the galactic city (peripheral) model (1 point) — accept any: multiple development centers (edge cities, CBDs, suburban CBDs) based on specialized products/services; a decentralized pattern of business spread across the region; a circumferential/circular/radial highway pattern typical of a galactic city; several highway intersections serving as nodes for new business districts or development centers.

Solution 3

(e) Mark scheme

- Explain ONE local economic change from deindustrialization (1 point) — accept any: a shift from a manufacturing/secondary economy to a service/technology (tertiary, quaternary, or quinary) economy; outsourcing of manufacturing abroad causing declining local employment or rising unemployment; increased CBD unemployment, declining investment, or falling real-estate values from lost manufacturing firms/jobs; increased use of post-Fordist methods (specialized firms, just-in-time supply chains, flexible production); falling GNI per capita or rising unemployment/underemployment as workers lose manufacturing jobs.

Solution 3

(f)

Mark scheme

- Explain how the listed products/services show a quaternary economy (1 point): the biotechnology and gene-therapy research, development, and information/knowledge-based services listed (genetic engineering research, biochemistry research, diagnostic science, R&D of treatments and vaccines) are knowledge-, information-, and research-intensive activities that define the quaternary sector, rather than the extraction (primary), manufacturing (secondary), or routine service (tertiary) sectors.

Solution 3

(g)

Mark scheme

- Explain a limitation of drawing country-scale conclusions from a regional-scale map (1 point): the map shows only one region (a metropolitan area of Massachusetts), so its pattern is not representative of the whole country — other regions may have different or no such clustering, so generalizing the regional agglomeration to the national scale would be inaccurate. Changing the scale of analysis changes the pattern observed and the conclusions drawn.