

JUNIORS

1.

A)

Venezuela

B)

Positive effects:

- Economic development
- GDP growth
- Development of other industries which are cooperative with oil industry
- Improvement of the geopolitical and military-strategic position
- Potential renewal of old industrial complexes

(each correct answer 0,5 point)

Negative effects:

- Ecological effects
- Pollution of the water, soil, air etc... by oil spills
- Acid rain
- Climate change
- Waste oil
- Potential neglect of other economic activities (too much reliance on one economic activity)

(each correct answer 0,5 point)

C)

- Factors of localization of oil refineries:
- Enough surface area (with all warehouses contains several square kilometers)
- Enough reserves of water
- Favorable microclimatic conditions
- Transport infrastructure (especially water transport, railway transport)
- Highly qualified labor force
- Proximity to large cities, ports etc...

D)

Reliance on other economic activities (tourism, other industries, service industry etc), usage of renewable natural resources (especially solar energy), etc.... (all suggestions that are explained correctly)

2.

A)

Table 1 (town A)

Year	Population	Birth rate	Death rate	Immigration	Emigration	Changes in the number of citizens
1985	245 193	2 865	2 248	15 648	14 321	1944
1990	256 877	2 619	2 281	15 354	14 113	1579
1995	259 699	2 586	2 555	16 301	15 465	867
2000	254 982	2 293	2 657	16 302	15 879	59
2005	262 676	2 510	2 784	17 148	14 168	2706
2010	264 708	2 341	2 816	16 451	14 443	1 533
2015	283 374	2 963	2 802	22 463	14 864	7 760

Table 2 (town B)

Year	Population	Birth rate	Death rate	Immigration	Emigration	Changes in the number of citizens
1985	77 570	1 006	950	3 245	3 895	-594
1990	71 774	859	888	2 220	4 687	-2 467
1995	68 033	846	879	2 081	3 563	-1 515
2000	71 543	881	1 091	3 142	2 486	446
2005	68 892	830	1 166	1 950	2 312	-698
2010	66 098	789	1 194	1 852	2 243	-796
2015	65 201	740	1 236	1 875	2 017	-638

(each correct answer 0,5 point)

B)

Average annual growth rate of population: 1,41%

(correct answer 1 point)

The number of inhabitants in town A between 2010 and 2015 is increased by 18,666 or 7%. This city is located on the territory of the former West Germany, which was one of the most (industrial) developed European countries. Because of this, town A is characterized by positive migration balance which was 7 599 in 2015. Immigration is particularly pronounced in the period 2010-2015. mostly due to the arrival of migrants from the territory of North Africa and Southwest Asia, but also from some parts of Europe. The reasons for the sudden increase in the mechanical inflow from these parts of the world in Germany and the city A are political (war conflicts, Arab Spring, political instability, political persecution) and economic (unemployment, poverty, hunger). Population from these parts of the world is mainly Islamic religion and traditionally has a higher birth rate than the local population. In addition to the migrant population that lived in town A before 2010, the new wave of migrants caused a positive natural increase.

(correct answer 1 point)

C)

Average annual growth rate of population: -1,49%

(correct answer 1 point)

The number of inhabitants in the city B declined by 5,796 or 7.5% between 1985 and 1990. This city is located on the territory of the former East Germany, which existed in a given period to be analyzed. East Germany was a socialist country (in contrast to capitalist West Germany). Due to the negative natural increase and migration balance of the population, the total population of the country was constantly decreasing. In this transition period, the economic situation has become unstable, industrial production has decreased, unemployment and emigration have increased (especially after the fall of the Berlin Wall 1989). The same processes manifest themselves in the city B, which recorded a negative migration balance in the observed period, while natural increase had a tendency to decline. Natural growth has been transformed from the positive to the negative.

(correct answer 1 point)

3.

A)

The unplanned/poorly planned, uncontrolled spreading of urban development/build-up area on undeveloped land near a city/in city surroundings with low-density/low-density residential housing...

B)

- Loss of productive farmland/agricultural land
- The car becomes a necessity – jobs, schools, shopping are spread far apart
- Public transit system is non-existent/not developed as quickly as homes are built/increased traffic fatalities and jams
- Long commutes: fatigue, less home time
- High costs to the environment – congestion, smog, water pollution and waste management
- Decrease in social capital and loss of natural habitats, wildlife and open space

(each correct answer 1 point)

C)

Brownfield - vacant/abandoned or underutilized places where past (in most cases) industrial or commercial activities may have left contamination (pollution) behind, including: factories, gas stations, former military bases, discarded railway lands, disused warehouses, waterfront properties (port lands) formerly used for industrial or commercial activities;

(correct answer 1 point)

Main characteristics:

- Have been affected by the former uses of the site and surrounding land are derelict or underused
- May have real or perceived contamination problems are mainly in developed urban areas
- Have the potential for being redeveloped
- Require intervention to bring them back to beneficial use

(each correct answer 0,5 points)

4.

A)

1, 2, C, D, E, F

(3, 4 correct answers 0,5 points, 5, 6 correct answers 1 point)

B)

Correctly marked parts of the relief that have higher altitude of 287 m.

C)

Parts of the city that would be treated by the flash floods are: 2, D, E, F.

(2, 3 correct answers 0,5 points, 4 correct answers 1 point)

Flash floods will occur within small catchments, where the response time of the drainage basin is short. Many hydrological factors have relevance to the occurrence of a flash flood: topography, terrain gradients, soil type, vegetative cover, human habitation, antecedent rainfall, etc. In steep, rocky terrain or within heavily urbanized regions, even a relatively small amount of rainfall can trigger flash flooding.

(correct answer 1 point)

D)

- Hard engineering involves building artificial structures which try to control rivers.
- The dam traps water, which builds up behind it, forming a reservoir. Water can be released in a controlled way.
- Raising the banks of a river
- Flood relief channels
- Flood warnings and preparation (The environmental agency monitors rivers and issues warnings via newspapers, TV, radio and the internet when they are likely to flood so people can prepare)
- Floodplain zoning (Allowing only certain land uses on the floodplain reduces the risk of flooding to houses and important buildings)

(1 correct answer 1 point)

5.

A)

Desertification

(correct answer 1,5 points)

Problems examples:

- Losing of agricultural area
- Losing of all kinds of vegetation (grass, trees, scrub)
- Poverty that can cause conflicts
- Migration of local people
- Water scarcity

(each correct answer 0,5 point)

B)

Senegal, Mauritania, Mali, Burkina Faso, Niger, Nigera, Chad, Sudan, Ethiopia, Eritrea, Djibouti.

(5,6,7,8 correct answers 0.5 points, 9,10,11 correct answers 1 point)

C)

Examples of effects:

- Carbon sequestration
- Mitigation of climate change
- Improvement of the local climate condition
- Spread of the forest habit
- Protection of the agricultural area
- Improvement the economic potential of countries
- Increasing the concentration of water vapour in the air
- Decreasing of the air temperature
- Decreasing droughts
- More food
- Prevent erosion etc.

(1 correct answer 1 point, 2 correct answers 1,5 points, 3 correct answers 2 points)

D)

Examples of the challenges:

- Trees dying due to climate condition
- Financial problems
- Logging
- Slow decision making process/ Administration problems/ bureaucracy problems

(each correct answer 0,5 point)

6.

A)

City in the picture	Location number	City name	Civilization to which it belonged
A	1	TIKAL	MAYA
B	2	TEOTIHUACAN	AZTECS
C	3	MACHU PICCHU	INCA

B)

Tourism. Tourism is one of the most developing branches of economy. Rising number of tourist, each year, can have negative impact at the sustainability of material cultural heritage of ancient civilization. Unchecked tourist development also can endanger cultural heritage.

Another problem for indigenous people is growing dependence of many regions' economies on the tourism industry.

Incompatibility (differences) between traditionalism of indigenous people and modern lifestyle.

Globalization (Westernisation). Globalization influences cultural heritage and cultural identity in many ways. The impact of globalization on cultural identities has traditionally been viewed as negative. From this perspective cultural identity has been deemed a victim of a homogenous, Western, consumer culture. Accepting the western cultural shape, in front of its own, could have severe negative impact at cultural identity of locals (especially in the fields of: lifestyle, language, clothing, religion, values...). *Any other negative relationship between globalization and cultural identity should be considered as correct answer!*

Material heritage could also be affected and damaged by war, earthquakes, or some other natural disasters. Uncontrolled spreading of town can literary swallows some material heritage (Pyramids of the Sun and Moon – Teotihuacan).

Deforestation affects not just the animal, soils, or micro – climate conditions, but also natural habitats of some indigenous people that lives in tropical forests for a centuries.

(each correct answer 0,5 point)

C)

At first, most states in South America became independent at the beginning of XIX century (over the one hundred years before African states).

By its specificities, decolonization of South America cannot be compared with anti-colonial struggle in Africa. In South America, process of the decolonization was about fighting between the ruling structure of the colony and the metropolis (Spain and Portugal). On the other side, in Africa, a struggle between colonial authorities (European countries) and autochthonous population (indigenous people) took a place. In its base, war of independence in South America was a secessionist war - Creole peoples against the metropolis (Spain or Portugal). In this war, local population (indigenous people) did not realize their own interest (as locals in Africa); on the contrary they were often engaged in the interest of the Spanish or Portuguese monarchy.