

Proves d'accés a la universitat per a més grans de 25 anys

Llengua estrangera Anglès

Sèrie 3

Fase general

Qualificació parcial			TR
Qüestions d'opció múltiple	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
Qualificació			

La suma parcial de les qüestions d'opció múltiple no pot ser inferior a 0 punts.

Qualificació total			TR
Qualificació parcial			
Qüestions	9		
	10		
Suma de notes parcials			
Qualificació final			

Qualificació

Etiqueta de correcció

Etiqueta de l'estudiant

Opció d'accés:

- ☐ A. Arts i humanitats
- ☐ B. Ciències
- ☐ C. Ciències de la salut
- ☐ D. Ciències socials i jurídiques
- ☐ E. Enginyeria i arquitectura



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'STEAM LOOPS' AND CLIMATE CHANGE

Across North America, hundreds of downtowns, college campuses and hospitals are heated by steam carried through networks of underground pipes. Electric power companies installed many of these 'steam loops' more than 100 years ago in older East Coast cities like New York, Boston, and Philadelphia. Most people, however, only know this underground network exists because they've seen steam rising in streets, either in real life or on film. More than 900 of these systems exist in the U.S. and Canada, and there are thousands more worldwide.

Today, these systems, which often provide chilled water for cooling as well, are experiencing a renaissance as a potential solution to climate change.

In Philadelphia, steam gets generated at a plant built in 1915. Steam travels through 41 miles of pipe to dozens of buildings.

The plant illustrates the evolution of electric generation. The building has **high ceilings** that are lined with **tiles**, and detailed **brickwork**, which were characteristic of an era when electricity had begun to replace gas lighting.

Today the building is a modern installation producing electricity, and at the same time it efficiently uses excess heat to produce the steam heating Philadelphia buildings. It also produces high grade steam that is used to sterilize equipment at nearby hospitals.

The plant originally burned coal mined north of the city. It switched to burning oil during World War II. Today it burns natural gas and some waste grease from nearby restaurants to produce electricity and uses the waste heat to generate the steam.

Text adapted from an article by
Susan PHILLIPS. *National Public Radio* [online] (October 7, 2022)

high ceilings: sostres alts / techos altos

tiles: rajoles / azulejos

brickwork: obra vista / ladrillo

Després d'haver llegit el text, responeu a les qüestions seguint les instruccions que es donen en cada cas. Cada qüestió val un punt. En les qüestions d'opció múltiple, es descomptaran 0,33 punts per cada resposta incorrecta; per les qüestions no contestades no hi haurà cap descompte. En les altres qüestions, es descomptaran 0,05 punts per cada falta d'ortografia, de morfologia, de lèxic o de sintaxi. Les faltes repetides només es comptaran una vegada.

Después de leer el texto, responda a las cuestiones siguiendo las instrucciones que se dan en cada caso. Todas las cuestiones valen un punto. En las cuestiones de opción múltiple, se descontarán 0,33 puntos por cada respuesta incorrecta; por las cuestiones no contestadas no habrá ningún descuento. En las demás cuestiones, se descontarán 0,05 puntos por cada falta de ortografía, de morfología, de léxico o de sintaxis. Las faltas repetidas solo se contarán una vez.

Choose the correct answer (1-8).

1. Steam loops in cities
 - a) are a recent development.
 - b) were originally built in the early 20th century.
 - c) are being closed because they waste energy.
 - d) are a major source of pollution in New York and Philadelphia.
2. Steam loops both heat and cool
 - a) the underground metro in Boston.
 - b) factories in isolated areas in the U.S. and Canada.
 - c) many buildings in older cities.
 - d) most private homes in the U.S.
3. How is steam transported?
 - a) In underground pipes built by companies.
 - b) In underground pipes built by city governments.
 - c) Water is frozen first and then transported in tanks.
 - d) Steam cannot be transported; it is generated in each building.

4. Why is steam produced in a building with high ceilings with tiles in Philadelphia? Because
 - a) the building was once a tile factory.
 - b) generation of electricity depends on bricks.
 - c) all buildings in the U.S. are built with bricks.
 - d) the building was once used for burning coal, and tiles do not burn.
5. Some of the steam produced in the Philadelphia plant
 - a) comes from burning coal.
 - b) is used by hospitals to sterilize medical equipment.
 - c) is expelled into the atmosphere.
 - d) is piped to New York City for heating.
6. Which of the following best describes how electricity is currently generated at the Philadelphia plant?
 - a) Coal is burned.
 - b) Natural gas is burned.
 - c) A nuclear reactor is in operation.
 - d) Oil is burned.
7. Which of the following is a synonym for the word *illustrates* in the sentence “The plant illustrates the evolution of electric generation”?
 - a) draws
 - b) installs
 - c) paints
 - d) shows
8. Which of the following can substitute for the word *however* in the phrase “Most people, however, only know this underground network exists because they’ve seen steam rising in streets [...]”? Make sure the new phrase retains its original meaning.
 - a) also
 - b) because
 - c) nevertheless
 - d) since

Please answer the following questions in English. (Please do not copy text but rather answer in your own words; your answers should be between 40 and 60 words in length.)

9. What is different about the production of steam in the Philadelphia plant today, as compared with when the plant was originally built?
10. Why are steam loops in American cities “experiencing a renaissance”?

TR	Observacions:
Qualificació:	Etiqueta de revisió

Etiqueta de l'estudiant



Institut
d'Estudis
Catalans