

 POLITÉCNICA	UNIVERSIDAD POLITÉCNICA DE MADRID PRUEBAS DE ACCESO PARA MAYORES DE 25 AÑOS INGLÉS	2017
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INSTRUCCIONES GENERALES Y VALORACIÓN

Puntuación: 10 puntos

Tiempo: 60 minutos

Shaping the Future of Construction

1 In 1950, the fishing village of Shenzhen in south-east China had just over 3,000 inhabitants. By 2025, this number will exceed 12 million. And Shenzhen is not alone. Urban areas around the globe are growing by 200,000 people per day, and all these people will need affordable housing as well as social, transport and utility infrastructure.

2 This is the starting point for a new report that gives some examples of the innovation in construction that the world needs in order to meet this enormous challenge.

3 Deloitte's new Amsterdam head office, the Edge, shows how smart building design can provide flexibility and comfort for its occupants while also reducing energy demands. Producing more energy than it consumes, the Edge is widely regarded as the most sustainable office building in the world. The multi-storey, north-facing glass atrium admits lots of daylight while concrete walls on the south facade absorb heat from sunlight, and solar panels convert that sunlight into energy.

4 A single network controls every technical system in the building, including a network of tens of thousands of sensors placed around the building. The lift, the lighting and cooling systems, coffee machines and towel dispensers, even the robot security guard which cruises around the building at night, can all be controlled and adjusted centrally.

5 Combined with a hot desk approach to working, the technological flexibility of the building means that its 1,100 workspaces can serve more than 2,500 staff.

6 Compared with many other industries, the construction industry has traditionally shown slow technological progress and has remained rather conventional in its ways. It is now the moment to meet the requirements of creating ever more human living space fast and in a cost-effective and sustainable way, the report suggests.
(285 words)

Adapted from:

WORLD ECONOMIC FORUM

Written by Andrea Willige.

Formative Content

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QUESTIONS

- 1 Are the following statements TRUE or FALSE? Write down the evidence from the text. No marks are given for only TRUE or FALSE. (2 PUNTOS)
 - a) Deloitte's new building has not only glass walls to take advantage of solar energy.
 - b) The Edge general system has a central network to control all the building internal services, but the robots regulate the security service.

- 2 **In your own words, explain the following sentences from the text** (Maximum 15 words each). (2 PUNTOS)
 - a) By 2025, this number will exceed 12 million.
 - b) ...that its 1,100 workspaces can serve more than 2,500 staff.

- 3 **Find a synonym for the following words, according to their meaning, in the text** (1 PUNTO):
 - a) inexpensive (paragraph 1)
 - b) indicates (paragraph 3)
 - c) elevator (paragraph 4)
 - d) quite (paragraph 6)

- 4 **Complete the following sentences. Use the appropriate form of the word in brackets, when given.** (2 PUNTOS)
 - a) Not so ----- ago, smart office buildings were seen as something out of a science-fiction movie, but today the technology exists to make ----- a reality.
 - b) Smart buildings are much----- (easy) to run and maintain, ----- those that are not adapted to these changes.
 - c) If tomorrow's buildings looked -----how technology is making our offices smarter, our homes and even our building sites ----- (to be) more affordable.
 - d) Rewrite the following sentence in the passive voice:

. - So how will the smart office benefit the people and businesses that occupy it? -

- 5 **Write about 50 words about one of the following topics. (Choose only one topic)** (3 PUNTOS).
 - a) Describe the main characteristics of the ideal city of the future. Give your opinion with some examples.
 - b) Do you think that giving people more control over their working place's heating and lighting make them feel happier? Give reasons for your answer.