

**PART I: ACCESS TO INFORMATION FROM WRITTEN TEXTS (60 points)**

Read the article below and then answer questions 1-7.

**THE DEMAND FOR SAND**

**I** Over the past few decades, there has been a significant increase in the size and number of cities worldwide. More than half of the world's population now lives in cities, compared to a third just fifty years ago, and the numbers only keep rising. It is no secret that urban development often comes at a high environmental cost. Few people, however, realize that much of the damage is caused by the 5 demand for one particular natural resource: sand.

**II** Sand is the thing modern cities are made of. As one of the main components of concrete and asphalt, it is used in the construction of every apartment building, office tower and shopping mall, and every road as well. In addition, sand is used for the process known as "land reclamation": by pouring billions of tons of sand into the sea, countries with a coastline can create large areas 10 of additional land. The densely populated island-state of Singapore, for instance, has used this method since the 1960s to increase its area by 20%, providing space for new housing and commercial projects.

**III** Unfortunately, the sand in the planet's many deserts is not the coarse type that is required for producing high-quality building materials. Instead, sand for construction purposes must be taken 15 from places such as lakes, rivers, and the sea. However, some countries completely lack the right kind of sand, and even in those where it is available, local sources have been so heavily exploited that supplies are running out. Consequently, more and more countries are forced to rely on imported sand. The result is a global trade that has been growing rapidly from year to year.

**IV** Recently, however, it has become clear just how destructive the removal of huge quantities 20 of sand can be: coastlines are eroding, rivers are becoming polluted, and habitats of fish are disappearing. Moreover, the extraction of sand can cause the collapse of nearby roads, houses, and bridges, putting local communities in danger. All this has led many governments to introduce regulations relating to the removal and sale of sand. In the USA, for example, extraction is forbidden on beaches and near population centers. Other countries have restricted the export of sand. 25 But since enforcement is often weak, and the profits to be made are so high, the trade in sand shows no sign of slowing down.



ו The only effective way to deal with the problem may be to reduce the global demand for sand. Alternatives suggested so far have all been too expensive, and efforts are now being made to develop cheaper options. In one highly innovative project, for example, scientists are trying to 30 create a type of concrete that uses plastic bags instead of sand. We can only hope that practical substitutes will be found before the world's dependence on this vital natural resource leads to even greater damage.

**QUESTIONS** (60 points)

Answer questions 1-7 in English according to the article. In questions 4 and 5, circle the number of the correct answer. In the other questions, follow the instructions.

1. What do we learn from paragraphs I and II ?

PUT A ✓ BY THE TWO CORRECT ANSWERS.

- ..... i) Why so many people are living in cities.
- ..... ii) Why few people understand the importance of sand.
- ..... iii) What kind of problem is caused by the growth of cities.
- ..... iv) Why modern buildings are made of concrete.
- ..... v) Why the demand for sand is growing.
- ..... vi) How construction methods have been changing.

(2x7=14 points)

2. COMPLETE THE SENTENCE.

From paragraph II we learn why Singapore .....

..... (8 points)

3. COMPLETE THE SENTENCE.

From paragraph III we can understand why desert sand cannot .....

..... (8 points)

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4. What does the writer explain in paragraph III?

- i) Why countries don't use their sources of sand properly.
- ii) Where sand supplies are still available.
- iii) Why a global trade in sand has developed.
- iv) When it is preferable to use local sand.

(7 points)

5. What are we told in lines 19-22?

- i) What extraction processes are used to remove sand.
- ii) Why people didn't expect the extraction of sand to be harmful.
- iii) Why the extraction of sand often takes place near population centers.
- iv) What environmental damage is caused by the extraction of sand.

(7 points)

6. COMPLETE THE SENTENCE.

According to paragraph IV, weak enforcement is one of the reasons that countries haven't managed

to .....

(8 points)

7. COMPLETE THE SENTENCE.

The innovative project is mentioned in lines 29-30 as an example of attempts to find .....

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(8 points)