



ANGLAIS

Water, rather than land shortages, is now stopping agriculture expanding in many regions, (...) Globally, water seems to be abundant, but the problem is that where it is accessible it is either being heavily polluted or is taken from reservoirs which are almost empty.

5 A quarter of the world gets its supplies from deep aquifers, or ground water¹. But such is the rate at which these underground reservoirs are being emptied, that many water tables are dropping alarmingly, are being exploited 10 times faster than they are being naturally recharged. Water tables in part of China are dropping almost 1.5 meters a year and 400 of its 600 northern cities face severe shortages. In Tamil Nadu, India, they have dropped 30
10 meters in 30 years and many aquifers have run dry.

The over pumping of ground water leads to other problems. Removing large amounts of water can magnify the concentration of pollutants in the water that remains, in many cases polluted surface water or salty sea water pours into the aquifer to replace the ground water making it impossible to farm. Salt-tolerant genetically modified crops are being developed to
15 stop this.

Pesticides nitrates, petrochemicals, fluorides, heavy metals and mining wastes², all potentially serious health hazards, are now polluting major aquifers in the industrialized world and water drawn from them needs expensive treatment before it can be used.

20 In Bangladesh, which was almost entirely dependent on rivers and streams just 30 years ago, more than a million wells³ have been dug to tap into deep aquifers. What nobody realized when the wells were dug, was that water was heavily mixed with arsenic washed down many centuries ago from the Himalayas. The result is that up to 15 million people, in one of the world's poorest countries, are slowly being poisoned, with thousands developing lesions and cancers.

25 The ecological consequences of consuming ground water are mostly neglected, but deep aquifers are a vital link in the hydrological cycle because they release water slowly into rivers, lakes and wetlands⁴ in the dry seasons and absorb water to prevent flooding⁵ in the wet times. The only reason that many of the world's great rivers such as the Niger and the Nile flow all year round is because of ground water release.

John VIDAL; Earth, The Guardian, August 2002.

Foot notes :

1. nappe phréatique = water table
5. inondation

2. déchets miniers 3. puits

4. zones inondées

Epreuve du 1^{er} groupe

I. COMPREHENSION (09 marks)

A. Write true or false : Justify from the text. (03 marks)

1. It's not land reduction that will stop agriculture ; it is lack of water.
.....
2. There is sufficient drinkable water on earth.
.....
3. Only 10 % of the water used from reservoirs is recharged.
.....

B. Read the text and complete these following sentences. (01 mark)

4. If an important quantity of water is removed, this can
5. In Tamil Nadu, each year water tables fall by

C. Answer this question : (01 mark)

6. What is the solution adopted to face up the problem created by the over pumping of ground water ?
.....

D. Complete the hydrological cycle. (01 mark)

Deep aquifers	Dry season	Wet season
Role	7	8

E. Choose the right definition for these words (01 mark)

9. **hazards**
 - a. chances
 - b. risks
 - c. services
10. **salt - tolerant**
 - a. salt -abundant
 - b. salt-free
 - c. salt-resisting

F. Fill in the table about Bangladeshi situation with : few, many, good, or bad (02 marks)

	In Bangladesh	
Bangladesh	In 1972	In 2002
Streams and river	11 available	12 available
Wells	13.....	14.....
Water quality	15. Good	16. Bad
People's health	17.....	18.....

Epreuve du 1^{er} groupe**II. LINGUISTIC COMPETENCE (07 marks)****G- Complete the sentences below with: *unless, while, whereas, although, despite* (02 marks)**

19.there is a global change of attitudes, water consumption will rise up to 70 % in a few years.
20.water-short countries were 26 in 1990, they can be 65 in the 20 years to come.
21. 1.2 billion people lack water.....twice that number have no sanitation.
22.Johannesburg summit threats, people continue to spoil water.

H-Choose the correct forms of verbs to complete the passage. (02 marks)

Important progress 23 (**has made - has been made - will be made**) in the treatment of polluted water in the last few years. But the quality of drinking water 24 (**is remaining - remains - is remained**) a vital question for local leaders. Strict measures 25 (**must be taken - must take - must to take**) in poor countries to prevent wetlands from 26 (**drying up - to dry up - dry up**).

I-Form an adjective, noun or verb from the following words and complete the sentences consumption / poor / predict (01.5 marks)

Most results in scientific research can be anticipated, but in chemistry some discoveries are entirely 27

Water shortage in rural areas can be a factor which increases 28

If contaminated water is 29 by healthy populations, their lives can be endangered.

J- Put into the active: (01 mark)

15 million people are slowly being poisoned by arsenic.

30

The ecological consequences of polluted ground water have been neglected.

31

K- Put into the passive: (0.5 marks)

Did they clean polluted water in treatment plants?

32

III. ESSAY WRITING Choose one topic (04 marks)

33. Too many dams and too much irrigation lead to global water shortage. What solutions to such a problem do you advocate? (about 100 words)
34. You are discussing with a factory manager who is over pumping water from River Senegal. In about 100 words, try to persuade him to use alternative methods.