

# UNIVERSITÀ DEGLI STUDI DI MILANO

### CONCORSO PUBBLICO, PER TITOLI ED ESAMI, A N. 1 POSTI DI CATEGORIA C - AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, CON RAPPORTO DI LAVORO SUBORDINATO A TEMPO INDETERMINATO PRESSO L'UNIVERSITÀ DEGLI STUDI MILANO - DIPARTIMENTO DI SCIENZE BIOMEDICHE, CHIRURGICHE ED ODONTOIATRICHE - BANDITO CON DETERMINA N. 2849 DEL 26.02.2021, IL CUI AVVISO È STATO PUBBLICATO SULLA G.U. N. 20 DEL 12.03.2021 - CODICE 21323

La Commissione giudicatrice del concorso, nominata con determina n. 5048 del 30/03/2021 e così composta:

| Prof.ssa Orioli Marica         | Presidente |
|--------------------------------|------------|
| Dott.ssa Roda Gabriella        | Componente |
| Dott.ssa Casagni Eleonora      | Componente |
| Dott.ssa Samoré Antonia Bianca | Segretaria |

comunica i questiti relativi alla prova orale:

### Gruppo di quesiti n. 1

a. Determinazione delle sostanze stupefacenti in matrice urinaria: allestimento di una procedura di analisi di screening.

b. Differenze fra cannabis stupefacente e cannabis light.

c. Brano in inglese: During most of their lives, surge glaciers behave like normal glaciers, travelling perhaps only a couple of inches per day. However, at intervals of 10 to 100 years, these glaciers move forward up to 100 times faster than usual. The surge often progress along a glacier like a great wave, proceeding from one section to another. Subglacial streams of meltwater might act as a lubricant, allowing the glacier to flow rapidly toward the sea. The increasing water pressure under the glacier might lift It off its bed, overcoming the friction between ice and rock, thus freeing the glacier, which rapidly slides downhill. Surge glacier also might be influenced by the climate, volcanic heat, or earthquakes. However, many of these glaciers exist in the same areas as normal glaciers, often almost side by side.

Some 800 years ago, Alaska's Hubbard Glacier advanced toward the sea, retreated, and advanced again 500 years later. Since 1985, this seventy-mile-long river of ice has been flowing steadily toward the Gulf of Alaska at a rate of approximately 200 feet per year. In June 1986, however, the glacier surged ahead as much as 47 feet a day. Meanwhile, a western tributary, called Valerie Glacier, advanced up to 112 feet per day. Hubbard's surge closed off Russell Fiord with a formidable ice dam, some 2,500 feet wide and up to 800 feet high, whose caged waters threatened the town of Yakutat to the south.

About 20 similar glaciers around the Gulf of Alaska are heading toward the sea. If enough surge glaciers reach and raise sea levels, West Antarctic ice shelves could rise off the seafloor and become adrift. A flood of ice would then surge into the Southern Sea. With the continued rise in sea level, more ice would plunge into the ocean, causing sea levels to rise even higher, which in turn would release more ice and set in motion a vicious cycle, The additional sea ice floating toward the tropics would increase. Earth's albedo and lower global temperatures, perhaps enough to initiate a new ice age. This situation appears to have occurred at the end of the last warm interglacial (the time between galaciations), called the Sangamon, when ice cooled the ocean dramatically, spawning the beginning of the Ice Age.

Questions:

- 1. What is the main topic of the passage?
  - A. The definition of a surge glacier
  - B. The history of a particular surge Glacier



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- C. The classification of different types of surge glaciers
- D. The causes and consequences of surge glaciers
- 2. The author compares the surging motion of a surge glacier to the movement of a
  - A. Boat
  - B. Fish
  - C. Machine
  - D. Wave

# Gruppo di quesiti n. 2

a. Determinazione delle sostanze stupefacenti in matrice urinaria: allestimento di una procedura di analisi di conferma.

b. L'importanza della determinazione dei metaboliti nell'analisi forense

## c. Brano in inglese:

During most of their lives, surge glaciers behave like normal glaciers, travelling perhaps only a couple of inches per day. However, at intervals of 10 to 100 years, these glaciers move forward up to 100 times faster than usual. The surge often progress along a glacier like a great wave, proceeding from one section to another. Subglacial streams of meltwater might act as a lubricant, allowing the glacier to flow rapidly toward the sea. The increasing water pressure under the glacier might lift lt off its bed, overcoming the friction between ice and rock, thus freeing the glacier, which rapidly slides downhill. Surge glacier also might be influenced by the climate, volcanic heat, or earthquakes. However, many of these glaciers exist in the same areas as normal glaciers, often almost side by side.

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## Questions:

- 3. Which of the following does the another mention as possible cause of surging glaciers?
  - E. The pressure of meltwater Underneath the glacier
  - F. The occurrence of unusually large ocean waves
  - G. The decline in sea levels
  - H. The shifting Antarctic ice shelves
- 4. Yahutat is the name of
  - E. A surge glacier
  - F. The last ice age
  - G. An Alaskan town

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H. An Antarctic ice shelf

Milano, 13 maggio 2021

La Commissione

Prof.ssa Orioli Marica - Presidente

Dott.ssa Roda Gabriella - Componente

Dott.ssa Casagni Eleonora - Componente

Dott.ssa Samoré Antonia Bianca - Segretaria