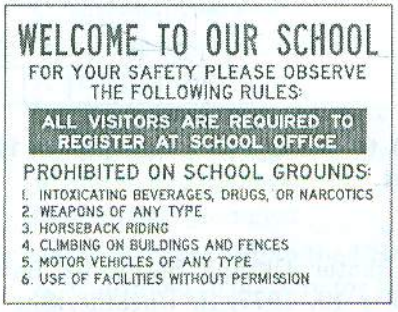
READING

TASK 1

Read the texts 1–6 and choose A, B or C. Mark your answers on the answer sheet.

HIGH SCHOOL RULES

1

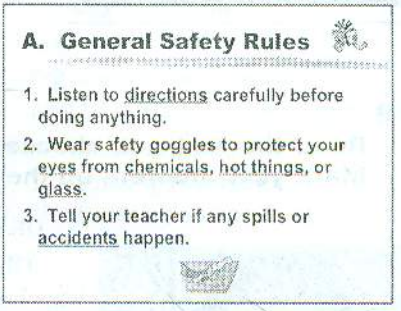


A Bicycle racks are provided.

B Visitors ought to sign in.

C No drinks on the school grounds.

2



A Quickly remove all the spills if they happen.

B Don't start work without being instructed.

C Goggles will protect your eyes from heat and direct sun rays.

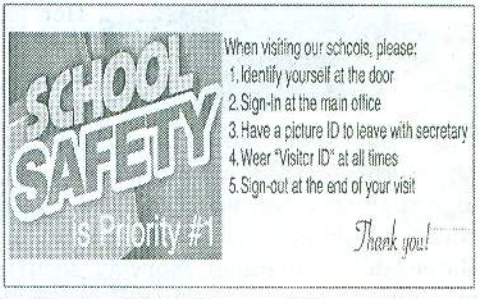
3

A All court sports are prohibited.

B Students cannot be present on school grounds after classes.

C No games are allowed in the evening.

4

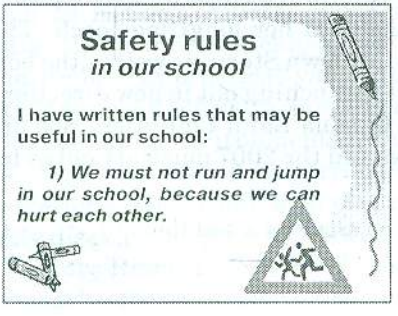


A No identification card for guests.

B Guests cannot move around the school freely.

C Write your name on an official list of visitors.

5



A Don't cross the road here.

B Don't run on the road.

C Running and jumping in school isn't allowed.

6

A No loitering vandalism in school premises.

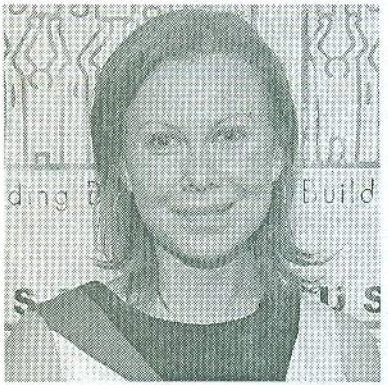
B Treat everyone and their property with respect.

C Directions of security guard must be followed.

1	2	3	4	5	6

TASK 2

Read the text and choose A, B, C or D to complete each gap 7–12. Mark your answers on the answer sheet.



OKSANA BAIUL

Olympic figure skater Oksana Sergiivna Baiul was born on November 16, 1977, in Ukraine. She is the only child of Sergei and Marina Baiul. Her father abandoned the family when Oksana was still a toddler. She discovered her passion for ice skating around the age of 4, and began to win competitions when she was 7.

By the age of 13, Oksana Baiul had been orphaned after the deaths of her grandparents and mother. Her skating coach, Galina Zmievskaya, took her in and became a surrogate parent to the young skater. Baiul lived with Zmievskaya's family in Odessa. As Zmievskaya explained to the Chicago Tribune in 1994, "You have no idea how this girl prepared to be Olympic champion. I hosed down the ice myself. No Olympic champion ever had such bad conditions to prepare in."

In 1993, Baiul won both the World Figure Skating Championships and Ukrainian National Championships. She went on to beat Nancy Kerrigan at the 1994 Olympic Games in Lillehammer, Norway, securing the gold medal in women's figure skating. The much-publicized win occurred in the wake of the Harding-Kerrigan scandal, where the husband and associates of skater Tonya Harding deliberately injured Kerrigan.

Baiul was only 16 years old when she achieved her victory at the Lillehammer Olympics – making her, at the time, only the second youngest figure skater in history to win the gold, after Sonja Henie.

Following the '94 Games, Oksana Baiul moved to the United States to skate professionally. She bought a house in Connecticut and broke with her longtime coach. That same year, Baiul published her autobiography, Oksana, My Own Story, as well as the book Secrets of Skating, a behind-the-scenes look at her sport. Branching out in new directions, Baiul launched a line of skating apparel in 2002, the Oksana Baiul Collection. She also continued to skate, performing in professional ice shows and the 2007 musical Cold as Ice.

7 Oksana became an orphan ...

A after her birth

B when she was a toddler

C at the age of seven

D in her teens

8 Her father ...
A played a significant role in the daughter's upbringing
B died when she was a toddler
C left the family when Oksana was little
D helped her to become a champion

9 Oksana's early achievements in sport began when she was ...
A four years old
B seven years old
C thirteen years old
D twenty years old

10 To be well prepared for the Olympic Games Oksana ....
A left Ukraine
B trained in the capital
C spent much time at the ice rink
D had to train at the self-made rink.

11 Sonja Henie is ... figure skater to win the gold at the Olympiad.
A the first youngest
B the second youngest
C the third youngest
D the fourth youngest

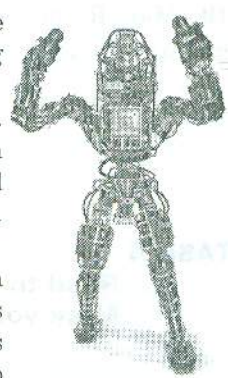
12 After immigrating to the USA, Baiul ...
A continued to prepare for the Olympics
B left the sport
C made her story into a film
D participated in ice-skating performances

7	8	9	10	11	12

TASK 3

Read the text and decide if the statements 13–20 are true or false. On your answer sheet mark: A if it is true, B if it is false.

AGILE ROBOTS



Computer scientists have created machines that have the balance and agility to walk and run across rough and uneven terrain, making them far more useful in navigating human environments.

Walking is an extraordinary feat of biomechanical engineering. Every step requires balance and the ability to adapt to instability in a split second. It requires quickly adjusting where your foot will land and calculating how much force to apply to change direction suddenly. No wonder, then, that until now robots have not been very good at it.

Meet Atlas, a humanoid robot created by Boston Dynamics, a company that Google acquired in December 2013. It can walk across rough terrain and even run on flat ground. Although previous robots such as Honda's ASIMO and Sony's diminutive QRIO are able to walk, they cannot quickly adjust their balance; as a result, they are often awkward, and limited in practical value. Atlas, which has an exceptional sense of balance and can stabilize itself with ease, demonstrates the abilities that robots will need to move around human environments safely and easily.

Robots that walk properly could eventually find far greater use in emergency rescue operations. They could also play a role in routine jobs such as helping elderly or physically disabled people with chores and daily tasks in the home.

Marc Raibert, cofounder of Boston Dynamics, pioneered machines with "dynamic balance" – the use of continual motion to stay upright – in the early 1980s. As a professor

at Carnegie Mellon University, he built a one-legged robot that jumped around his lab like a pogo stick possessed, calculating with each jump how to reposition its leg and its body, and how aggressively to push itself off the ground with its next bound. Atlas demonstrates dynamic balance as well, using high-powered hydraulics to move its body in a way that keeps it steady. The robot can walk across an unsteady pile of debris, walk briskly on a treadmill, and stay balanced on one leg when whacked with a 20-pound wrecking ball. Just as you instinctively catch yourself when pushed, shifting your weight and repositioning your legs to keep from falling over, Atlas can sense its own instability and respond quickly enough to right itself. The possibilities opened up by its humanlike mobility surely impressed Google. Though it's not clear why the company is acquiring robotics businesses, it bought seven others last year, including ones specializing in vision and manipulation.

Atlas isn't ready to take on home or office chores: its powerful diesel engine is external and noisy, and its titanium limbs thrash around dangerously. But the robot could perform repair work in environments too dangerous for emergency workers to enter, such as the control room of a nuclear power plant on the brink of a meltdown. "If your goals are to make something that's the equivalent of a person, we have a ways to go," Raibert says. But as it gets up and running, Atlas won't be a bad example to chase after. (*Will Knight*)

13 Computer scientists have designed robots that can move on the bumpy surface.

14 The robots which existed before had adequate balancing skills.

15 Atlas was created by the biomechanical engineers from Google.

16 The new robot is able to maneuver freely.

17 ASIMO and QRIO are rather clumsy robots.

18 Robots that walk properly can help people in performing surgeries.

19 Marc Raibert's robot can leap around and count the objects.

20 Atlas cannot be used in household because it's very expensive.

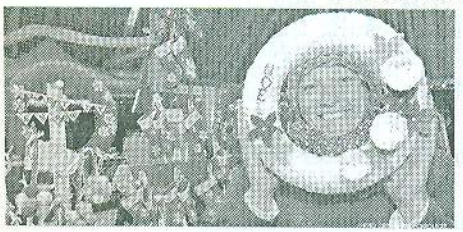
13	14	15	16	17	18	19	20

USE OF ENGLISH

TASK 4

Read the text and choose A, B, C or D to complete each gap 21–30. Mark your answers on the answer sheet.

FAIR BEATS WINTER WEATHER!



Hundreds of people braved the winter weather and flocked to Cressing Temple Barns on 21/22 November to show their support for Helen Rollason Cancer Charity.

Visitors experienced more than 80 stalls (21) _____ a cornucopia of food and gifts, and were also treated (22) _____ performances from the Bocking Brass Band, The Shoesettes, Chelmsford Gospel Community Choir, and the Maldon All Saints Handbell Ringers.