AlloSchool

English: 2Bac (Science and technology)

National Exam 2021 Normal Session

Professeur : Mme ZAARA Asmae

I- Text

[1] The company IBM Japan and four other partners are developing a smart suitcase that uses Artificial Intelligence (AI) to help people with visual disabilities to travel alone with greater freedom and security.

[2] Visually-impaired people usually face problems using public transport and accessing other services. Luckily, there are canes and guide dogs to lead them around obstacles. These aids will soon be complemented with smart suitcases which would help them to travel independently.

[3] Chieko Asakawa, an IBM Japan fellow who has vision problems, walks with the assistance of the first prototype of a robotic suitcase equipped with AI. The smart suitcase, which has been inspired by a proposal from Chieko, is equipped with a sensor, a camera, and a battery to detect obstacles and alert its users through tactile sensation. According to its designers, it will also notify users if friends approach or if there are cafes and other facilities nearby through an audio system.

[4] In an interview with a Japanese newspaper, Chieko said that she got the idea when she was pushing a suitcase in front of her during a business trip. She thought that visually-impaired people could walk safely if a suitcase would scan the surroundings for danger.

[5] Different companies are contributing to the development of the suitcase. IBM Japan will be responsible for Artificial Intelligence integrated into the suitcase. For its part, Alps Alpine will be responsible for tactile technology, Omron for image recognition and detection techniques, Shimizu for the navigation system, and Mitsubishi Motors for automotive technologies.

[6] The smart suitcase will be used at airports, shopping centres, and in other indoor areas. It will later be improved so that users can use it in outdoor areas. The device is expected to be on the market in 2022.





Adapted from : www.inceptivemind.com

II- Comprehension (15 pts)

Base all your answers on the text

A. CHOOSE THE BEST ANSWER. (1 pt)

The text is about

- a. an invention for the visually-impaired.
- b. a visually-impaired Japanese woman.
- c. a famous robotics company in Japan.

The best answer is : _____

B. ANSWER THESE QUESTIONS. (3 pts)

1. When did Chieko first have the idea of the smart suitcase?

_____

2. What will be Alps Alpine' s contribution to the design of the smart suitcase?

_____

3. When will people be able to buy the smart suitcase?

_____

C. FILL IN THE CHART WITH THE RIGHT INFORMATION FROM THE TEXT. (1 pt)

Name of company	Contribution to design the smart suitcase
1. IBM Japan	Arttficial Intelligence
2. Shimizu	
3. Omron	

II- Comprehension (15 pts)

D. ARE THESE STATEMENTS TRUE OR FALSE ? JUSTIFY. (3 pts)

1. Guide dogs help visually-impaired people to move easily : _____

2. The smart suitcase will be able to recognise people coming towards its users : _____

3. Mitsubishi Motors technology will allow the smart suitcase to recognise images : _____

E. COMPLETE THE FOLLOWING SENTENCES WITH INFORMATION FROM THE TEXT. (2 pts)

1. Having access to public services is _____
2. The _____ will allow the smart suitcase to notify its users.

F. FIND IN THE TEXT WORDS THAT MEAN ALMOST THE SAME AS (3 pts)

1. without any help (paragraph 2) : _____
2. model (paragraph 3) : _____
3. risk (paragraph 4) : _____

G. WHAT DO THE UNDERLINED WORDS IN THE TEXT REFER TO? (2 pts)

1. These aids: (paragraph 2) : _____
2. The device: (paragraph 6) : _____

III- Language (15 pts)

A. FILL IN THE GAPS WITH THE CORRECT WORDS FROM THE LISTS. (2 pts)

1. Brenda missed her class _____ she was taking part in a sports competition.

therefore - because - whereas

2. The vaccine _____ our laboratory has developed is effective.

whose - whom - which

B. GIVE THE CORRECT FORM OF THE WORDS IN BRACKETS. (2 pts)

1. Their business failed because of poor (manage) _____ and financial problems.
2. Lord of the Rings is one of the most (success) _____ movies I have ever seen.

C. FILL IN THE BLANKS WITH THE CORRECT WORDS FROM THE LISTS. (2 pts)

1. All the guests appreciated Tom's sense of _____ except for Caren.

joke - humour - amusement

2. Scientists will _____ conducting research till they find a cure for cancer.

keep on - log on - try on

D. REWRITE THE SENTENCES AS INDICATED. (3 pts)

1. The jury has interviewed all the candidates online.

All the candidates _____

2. "If I were you, I would buy a laptop instead of a tablet," Danny said.

Danny advised his friend _____

3. Although Saida is from a poor background, she managed to pursue her higher education.

In spite of _____

III- Language (15 pts)

E. PUT THE VERBS IN BRACKETS IN THE CORRECT TENSE. (2 pts)

1. By the end of this year, Mrs. Simpson (serve) _____ in the local council for 20 years.
2. While Anna (work) _____ on her language project, her brother was playing games.

F. MATCH EACH EXPRESSION TO ITS APPROPRIATE FUNCTION. (2 pts)

Expressions	Functions

• 1. “Why don’t you try another job?” • 2. “I don’t share the same view with you.” • 3. “Can you give me more details about the topic?” • 4. “What do you think of online learning?”	• a. asking for opinion • b. making a request • c. disagreeing • d. making a suggestion • e. complaining

G. COMPLETE THE FOLLOWING EXCHANGES. (2 pts)

1. Manager: I’m afraid the report you sent me is full of mistakes.

Pat : _____

2. Sandy: My computer can’t read PDF documents. What should I do ?

Casey : _____

IV- Writing (10 pts)

DO TASKS 1 AND 2

4-1/ TASK 1 (4 pts)

Complete the following paragraph :

Many tourists like to visit Morocco for different reasons. First,

IV- Writing (10 pts)

4-2/ TASK 2 (6 pts)

Modem technology has facilitated our lives in many ways.

Write a short article for your school magazine about how modem technology has made your life easier.

.