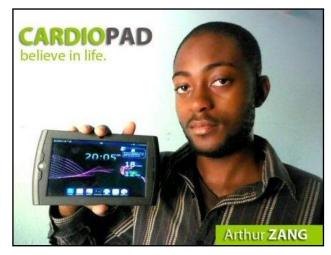
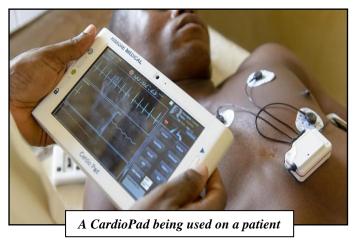


- [1] Arthur Zang, a 24-year-old Cameroonian computer engineer, invented the CardioPad. The idea for this invention came to his mind while he was watching a television programme about electrocardiographs during a visit to a hospital in 2007.
- [2] The CardioPad is a computer tablet. It diagnoses patients with heart diseases in remote areas where access to medical services is very restricted. When a medical examination is performed on a patient in a remote village, the results are transmitted from the nurse's tablet to that of the doctor who then interprets **them**. The device is believed to be Africa's first medical tablet that can send the results of cardiac tests to a cardiologist via internet



connection. The heart specialist makes a diagnosis and sends it back with a prescription to the nurse treating the patient.

- [3] "When I decided to design the tablet, I didn't have the knowledge because I'm basically a computer science engineer. I learned a lot from an online free programme on electronics provided by the Indian Institute of Technology. The funding of my project was difficult. I went to the banks, but they wanted all sorts of guarantees. So I posted a video about my project on Facebook to raise funds." This led to a \$20,000 grant from the Cameroonian government, which Zang used to produce 20 tablets, two of which are being tested in hospitals in Cameroon.
- [4] The Cameroonian scientific community has recognized the CardioPad as extremely effective. Thanks to this device, many patients living in remote areas do not have to travel to urban centers to seek medical examinations. Zang believes that his invention could save numerous human lives.



- [5] Mafo Abeni, a 55-year-old heart patient in a rural area of Cameroon, said "I've had cardiovascular disease for about a year now. It is too costly and difficult for me to see a heart specialist in the city; the CardioPad saves me time and money."
- [6] Mr. Zang says he has been contacted by private investors. But he is more interested in investors who share his vision, which is not of money, but of better ways to help improve people's lives.

Adapted from: www.rolexawards.com & voanews.com

خاص بكتابت الامتحان رقم الامتحان			الامتحان الوطني الموحد للبكالوريا الدورة العادية 2016  NS 12  الموضوع - NS 12  الاسم الشخصي و العائلي		المملكة المفريية وزارة التربية الولمنية وزارة التربية الولمنية وزارة التربية الولمنية والتكوين الممنى المناسب والتكوين الممنى المناسب والتكوين الممنى المتقويم						
والامتحانات والتوجيه تاريخ و مكان الازدياد											
2	المعامل	2	اللغة الإنجليزية مدة كلمسالك الشعب العلمية والتقنية والأصيلة الإنجاز			المادة الشعبــــــــــــــــــــــــــــــــــــ					
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متحان	كتابت الا	خاص بـ		لنقطة النهائية على 20: بالأرقام وا على المصحح التأكد من أن النقطة النه	شعب العلمية	اللغة الإنجليزية: كل مسالك الدوالتقنية والتقنية والأصيلة	المادة الشعبة و المسلك				
5	2 على	الصفحة:		سم المصحح و توقيعه:	الإجابة	ورقة	NS 12				
I. CO	MPREHEN	SION	(15 POINT	rs)							
			BASE ALL YO	OUR ANSWERS ON THE TEX	<b>T</b> .						
A. Cl	HOOSE TH	E BEST	TITLE FOR T	HE TEXT. (2 pts)							
<ol> <li>A new medicine for heart diseases</li> <li>A new way to manage hospitals</li> <li>A new medical invention</li> </ol>											
	The best	t title is .									
B. ARE THESE STATEMENTS TRUE OR FALSE? JUSTIFY. (3 pts)											
1. Zang got knowledge of electronics online.											
2.											
3.	3. Mafo Abeni is positive about the CardioPad.										
C. A			JESTIONS.	(3 pts)							
1.		_	ne idea of the Ca	_ · · -							
2.	2. What does the heart specialist do with the information he/she receives from the nurse?										
3. How did Zang collect money for his project?											
<b>D.</b> C	D. COMPLETE THE FOLLOWING SENTENCES. (2 pts)										
With the CardioPad, heart patients in distant areas no longer need to											
2. Zang is not interested in making money, but											

## لا يكتب أي شيء في هذا الإطار

الامتحان الوطنى الموحد للبكالوريا - الدورة العادية 2016 - الموضوع الصفحة: 3 ]على 5 مادة: اللغة الانجليزية - كل مسالك الشعب العلمية والتقنية والأصيلة - NS 12 -E. FIND IN THE TEXT WORDS OR PHRASES THAT MEAN THE SAME AS (3 pts) 1. limited (paragraph 2): 2. look for (paragraph 4): 3. expert (paragraph 5): F. WHAT DO THE UNDERLINED WORDS IN THE TEXT REFER TO? (2 pts) (paragraph 2) : . . . . . . . . . . . . . . . . . 1. **them** 2. which (paragraph 3):..... II. LANGUAGE **(15 POINTS)** A. GIVE THE CORRECT FORM OF THE WORDS IN BRACKETS. 1. Morocco was the first country in the world to recognise the (independent) . . . . . . . . . . of the USA. 2. Developing (renew) ..... energy is among the priorities of the Moroccan government. B. FILL IN THE GAPS WITH APPROPRIATE WORDS OR PHRASES FROM THE LIST. (2 pts) 1. Many . . . . . . . . . in the United States have been struck by the hurricane this year. problems disasters 2. MSF ..... Médecins Sans Frontières. - stands for - calls for makes up C. FILL IN THE GAPS WITH APPROPRIATE WORDS OR PHRASES FROM THE LIST. (2 pts) 1. Moha Oulhoucine, . . . . . . . . . everyone calls "The Maestro", died in February 2016. whose - whom - which 2. Many people today can't imagine . . . . . . . . without their mobile phones. to live - living - will live

## لا يكتب أي شيء في هذا الإطار

الامتحان الوطني الموحد للبكالوريا - الدورة العادية 2016 - الموضوع

	سفحة: 4 ∑على 5	2016 - الموضوع والأصيلة - NS 12 - الد	الامتحان الوطني الموحد للبكالوريا - الدورة العاديه مادة: اللغة الإنجليزية — كل مسالك الشعب العلمية والتقنية						
D. P	PUT THE VERBS IN I	BRACKETS IN THE CORREC	CT TENSE. (2 pts)						
	1. By June 2018, the workers (complete) the high-speed rail line between Tangier and Casablanca.								
	2. Leila first (meet) her husband when she was at university in 1996.								
E. R	REWRITE THE SENT	ENCES BEGINNING WITH T	THE WORDS GIVEN. (3 pts)						
1. <i>A</i>	1. Ahmed Sefrioui wrote <i>La Boîte à Merveilles</i> in 1954.								
1	La Boîte à Merveilles								
2. I	2. Despite being an expert, Jim couldn't recover his files from his hard disk.								
A	Although Jim								
3. V	We lost the game because	e our goalkeeper was not in good	d physical condition.						
If	f								
F. N	MATCH EACH EXPR	ESSION WITH ITS APPROR	IATE FUNCTION. (2 pts)						
		Expressions	Functions						
			a. expressing regret						
	1. "Karim will definit	ely join us this evening."	b. expressing apology						
	2. "I shouldn't have t	ried to fix the computer myself."	c. expressing certainty						
			d. expressing opinion						
	1 2								
G. V	G. WRITE APPROPRIATE RESPONSES TO THE FOLLOWING SITUATIONS. (2 pts)								
1. Reading books is better than watching movies.									
	You (express your opinion):								
	2. Your friend can't decide whether to buy a tablet or a laptop.								
	You (give advice)								

## لا يكتب أي شيء في هذا الإطار

5	5 ∫علی	الصفحة:	الامتحان الوطني الموحد للبكالوريا - الدورة العادية 2016 - الموضوع مادة: اللغة الإنجليزية - NS 12 -	
III. WRIT		(10 POINT		
TASK 1:	(4 pts)	Complete	the following paragraph about your favourite sport.	
N	Iy favourite	sport is	I prefer this sport for the following reasons.	
First, .				
TASK 2:	: (6 pts)	Resi	pond to this email.	
		sons spend too m	nuch time chatting and playing video games. I'm really worried about fe. What should I do? Please, help.  Worried father	
			E	Spelling
Dea	r worried fati	her,		
	• • • • • • • • • •	• • • • • • • • • • • • •		• • • •
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	• • • • • • • • •	DO NOTA	White volid name of Cion volid parall	• • • •
Send Sa	ve Now Disc		WRITE YOUR NAME OR SIGN YOUR EMAIL.	