

مدرسة ابن الأثير الثانوية

قطع المستوى الثالث

اسئلة الكتاب

اسئلة مقتضبة

الأستاذ رامي الحاج

# **LEVEL THREE**

# **MODULE ONE**

# **INFORMATION**

# **TECHNOLOGY**

**BY TEACHER:**

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## Information technology

### THE HISTORY OF COMPUTERS SB P 6 + AB P6 EX 1

Calculation	when you use maths to work out an answer	الحساب
Computer chip	a very small piece found inside every computer	رقاقة الحاسوب
Floppy disk:	a small square piece of plastic that was used to store information from computers	القرص المرن
PC ( Personal computer	a computer designed for one person to use	الكمبيوتر الشخصي
Program	a set of instructions enabling a computer to function	برنامج
Smartphone	a mobile phone that connects to the internet	الهواتف الذكية
World Wide Web	all the information started by computers through the internet	الأنترنت

### The history of computers.(p6)

When you are using a computer, think about the technology that is needed for it to work. People have been using types of computers for thousands of years. A metal machine was found on the seabed in Greece that was more than 2,000 years old. It is believed that this was the first ever computer.

عند استخدامك الحاسوب فكر بالเทคโนโลยيا التي يحتاجها لكي يعمل. وتستخدم الناس انواع من الحواسيب منذ الألف السنين ووجدت آلة معدنية في قعر بحر اليونان عمرها اكثر من 2000 عام ويعتقد بأنها اول كمبيوتر.

In the 1940s, technology had developed enough for inventors to make the first generation of modern computers; one such model was so large that it needed a room that was 167 square meters to accommodate it. During that decade, scientists in England developed the first computer program. It took 25 minutes to complete one calculation. In 1958 CE, the computer chip was developed.

في فترة الأربعينيات من القرن العشرين تطورت التكنولوجيا بما يكفي لتسهيل المختبر عين بصناعة الجيل الأول من الحواسيب ومثال عليها أن أحد النماذج احتاج إلى غرفة تبلغ مساحتها 167 م مربع لاستواعبه. وخلال ذلك العقد قام العلماء من إنجلترا بتطوير أول برنامج حاسوبي. وكان يستغرق 25 دقيقة لأكمال عملية حسابية واحدة. وفي عام 1958 م تم تطوير رقاقة الحاسوب.

The first computer game was produced in 1962CE, followed two years later by the computer mouse. In 1971 CE, the floppy disk was invented, which meant that information could be shared between computers. The first PC (personal computer) was produced in 1974CE, so people could buy computers to use at home.

انتاجت أول لعبة حاسوب في عام 1962م وبعدها بعامين انتجت الفارة. في عام 1971م تم اختراع القرص المرن واصبح ممكناً تبادل المعلومات بين الحواسيب بواسطته. اول كمبيوتر شخصي اُنتجه عام 1974م لذا أصبح بأمكان الناس شراء الحواسيب لاستخدامها في المنزل.

In 1983 CE, people could buy a laptop for the first time. Then, in 1990 CE, the British scientist Tim Berners-Lee developed the World Wide Web. It was not until 2007 CE that the first Smartphone appeared. Today most people used their mobile phones every day.

في عام 1983م استطاع الناس شراء الكمبيوتر المحمول لأول مرة. ثم في عام 1990م قام العالم البريطاني تيم بيرنرز لي بتطوير شبكة الأنترنت. ولم يكن حتى عام 2007م حتى ظهر اول جيل من الهواتف الذكية. اليوم معظم الناس تستخدم هواتفها النقالة يومياً.

What will happen in the future? You can already buy watches which can do the same as mobile phones. Scientists have also developed glasses that are capable of doing even more than this. Life is going to see further changes in computer technology. It is likely that all aspects of everyday life will rely on a computer program, from how we travel to how our homes are heated.

ماذا سوف يحصل في المستقبل؟ تستطيع حالياً شراء ساعات وللتى تقوم بعمل الهاتف الخلوي. وطور العلماء أيضاً نظارات لديها القدرة على القيام بأكثر من ذلك. وستشهد الحياة تغيرات أكثر في تكنولوجيا الحاسوب من طريقة سفرنا وحتى كيف يتم تدفئة بيونا.

**SB 7****Comprehension****4- Listen to and read the article again and answer the questions.**

- 1 Where was the first ever computer found?
- 2 What information in the text shows that the first modern computers were very large?
- 3 List the invention that were completed between 1958 CE and 1975 CE.
- 4 How do you think computer technology will develop further in the future? How far do you agree with the article?
- 5 We rely more and more on computer technology. How far do you agree that this is a positive development?

**Answers**

- 1- It was found on the seabed in Greece.
- 2- one such model was so large it needed a room that was 167 square metres to put it in.
- 3- 1) In 1958CE, the computer chip was developed.
- 2) The first computer game was produced in 1962CE.
- 3) Followed two years later by the computer mouse.
- 4) In 1971CE, the floppy disk was invented.
- 5) The first Pc was produced in 1974CE .
- 4- According to the text, everything in our life will rely on computer. But I don't agree with the article because I don't think that all aspects of our daily lives will rely on a computer program. Because this would result in too many problems if the computers crashed.
- 5- I agree that computers have become an essential factor in every aspect of our daily life from education to medicine to industry to many other things.

**ADDITIONAL QUESTIONS:**

- 1- What do you think about when you are using a computer?
- 2- When have people been using types of computers?
- 3- What have people been using for thousands of years?
- 4- Where was the first ever computer found?
- 5- When was the first ever computer found/made/invented?
- 6- When was the first generation of modern computers made/ invented?
- 7- What did the first modern computer need?
- 8- Write down the sentence which indicates that the size of the first generation of the modern computers was so large.
- 9- According to the text. Describe the first modern computer?
- 10- How size of the room that is needed for the first computer?
- 11- When did scientists develop the first computer program?
- 12- Where did scientists develop the first computer program?
- 13- Quote the sentence which indicates that the first computer program was very slow.
- 14- list the inventions that were completed between 1958CE and 1974CE.

**ANSWERS**

- 1- When you are using a computer, think about the technology that is needed for it to work.
- 2- People have been using types of computers for thousands of years.
- 3- People have been using types of computers for thousands of years.
- 4- It was found on the seabed in Greece.
- 5- It was found for more than 2.000 years old.
- 6- In 1940.
- 7- It needed a room that was 167 square metres to put it in.
- 8- One such model was so large it needed a room that was 167 square metres to put it in.
- 9- It was so large. It needed a room that was 167 square metres to put it in.
- 10- It needed a room that was 167 square metres to put it in.
- 11- Scientists developed the first computer program in 1940
- 12- In England
- 13- It took 25 minutes to complete one calculation.
- 14- 1) In 1958CE, the computer chip was developed

## Using technology in class

Young people love learning, but they like learning even more if they are presented with information in an interesting and challenging way. Today, I am going to give a talk about how you can use technology in Jordanian classroom.

يحب الشباب التعلم خاصة اذا قدم لهم بطريقة ممتعة ومثيرة للتحدي. اليوم سوف القى محاضرة حول كيفية استخدام التكنولوجيا في غرف الصفوف الأردنية.

Here are some ideas: Many classrooms now use a whiteboard as a computer screen. As a consequence, teachers can show websites on the board in front of the class. Teachers can then use the internet to show educational programs , play educational games, music, recordings of languages, and so on.

واليمك بعض الأفكار: كثير من الصنوف تستخدم اللوح المغناطيسي كشاشة حاسوب ويستطيع المدرسين عرض المواقع الإلكترونية على اللوح امام الطلبة. يستطيع المدرسين استخدام الأنترنت لعرض البرامج التعليمية ولعب الألعاب الإلكترونية وتشغيل الموسيقى والتسجيلات اللغوية والخ.....

In some countries, tablet computers are available for students to use in class. Therefore, students can use the tablets to do tasks such as showing photographs, researching information, recording interviews and creating diagrams. Tablet is ideal for pair in group work.

في بعض البلدان الكمبيوتر اللوحي (تابلت) أصبح متوفراً للطلاب ليستخدموه في الصالون. ذلك يمكن للطلاب استخدام الكمبيوتر اللوحي لحل الواجبات مثل عرض الصور والبحث عن المعلومات وتسجيل المقابلات وعمل الرسوم البنائية. الكمبيوتر اللوحي هو جهاز مثالى للعمل الثنائي الجماعي.

Teachers can perhaps ask their students to start writing a blog (an online diary). Either about their own lives or as if they were someone famous. They can also create a website, so for examples they can post work, photos and messages.

وربما يستطيع المدرسين طلب من الطلاب كتابة مدونة الكترونية اما عن حياتهم الخاصة او التخييل بأنهم اشخاص مشهورين. يمكنهم ايضا عمل موقع الكتروني و على سبيل المثال نشر الصور والرسائل فيها.

Most young people communicate through social media by which they send each other photos and messages via the internet. Some students like to send messages that are under 140 letters for anyone to read. Teachers can ask students to summarize information about what they have learnt in class in the same way. If students learn to summarize quickly, they will be able to use this skill in the future.

معظم الشباب ي التواصلون عبر وسائل التواصل الاجتماعية وعبرها يرسلون بعضهم الصور والرسائل عبر الانترنت. بعض الطلاب يحبون ارسال رسائل اقل من 140 حرف لأي شخص ليقرئها. يستطيع المدرسين الطلب من الطلاب تلخيص المعلومات عن الذي تعلموه في الصف بنفس الطريقة. واذا تعلم الطلاب مهارة التلخيص بسرعة سيتمكنون من استخدام هذه المهارة في المستقبل.

We all like to send emails, don't we? Emails exchanges are very useful in the classroom. Teachers can ask students to email what they have learnt to students of a similar age at another school. They could even email students in another country. As a result, students can then share information and help each other with tasks.

جميعا نحب ارسال الايميلات،ليس كذلك؟ تبادل الايميلات مفيدة جدا في الصف. ويستطيع المدرسين الطلب من الطلاب ارسال ما تعلموه الكترونيا الى طلاب من نفس العمر في مدرسة اخرى. ويستطيعون حتى الارسال لطلاب في بلد اخر. وبالتالي يستطيع الطلاب وتقديم مشاركة المعلومات ومساعدة بعضهم بالواجبات.

Another way of communicating with other schools is through talking to people over the computer. Most computers have cameras, so you can also see the people you are talking to. In this way students who are studying English in Jordan can see what students in England are doing in the classroom while they are speaking to them. You can also use this system to invite guest speakers to give talks over a computer. For example, scientist or teachers from another country could give a lesson to the class. If you had this type of lesson, the students would be very excited.

وطريقة اخرى للتواصل مع المدارس هي عبر التحدث الى الناس عبر الحاسوب. معظم الحواسيب تمتلك كاميرات تستطيع رؤية الناس الذين تتحدث اليهم. بهذه الطريقة الطلبة الذين يدرسون الانجليزية في الأردن يستطيعون رؤية ما يفعله الطلبة في بريطانيا في صفحاتهم أثناء الحديث إليهم. وتستطيع ايضا استخدام هذا النظام لدعوة ضيف يعطي محاضرات عبر الحاسوب. على سبيل المثال: عالم او مدرس من دولة اخرى يستطيع اعطاء محاضرة للصف. اذا كان لديك هذا النوع من الدروس فالطلبة سيتحمسون كثيرا.

Students often use computers at home if they have them. Students can use social media on their computers to help them with their studies, including asking other student to check and compare their work, asking questions and sharing ideas. The teacher must be part of the group, too, to monitor what is happening.

الطلبة غالبا يستخدمون الحواسيب في منازلهم اذا كانوا يملكونها. ويستخدم الطلبة وسائل التواصل الاجتماعية من حواسيبهم لمساعدتهم في دراستهم عبر الطلب من الطلبة الآخرين تقد ومقارنة اعمالهم وطرح الأسئلة ومشاركة الأفكار. وعلى المدرس أن يكون جزء من المجموعة ايضا ليشرف على ما يحدث.

## QUESTIONS

- 1-What do young people love?
- 2- How do young people like learning even more?
- 3- learning should be presented to young people with information that has two features?
- 4- What is the writer going to talk about?
- 5- What do Many classrooms now use?
- 6- How can teacher use a whiteboard as a computer screen?
- 7- What can teachers show on the board in front of the class?
- 8- Where can teachers show websites?
- 9-Why can teachers use the internet in the classrooms?
- 10-Mention two educational materials by using internet?
- 11-Who can show websites in front of the class?
- 12- Quote the sentence which indicates that a lot of classrooms are using a whiteboard these days?
- 13-Quote the sentence which shows that teachers can display websites on the board in front of the class?
- 14- Mention two tasks that students can do when they use the tablets?
- 15-The writer thinks that tablets are ideal for pair and group work. Explain this statement and justify your answer?

## ANSWERS

- 1- Young people love learning.
- 2- Young people love learning, but they like learning even more if they are presented with information in an interesting and challenging way.
- 3-intersting and challenging
- 4- He is going to give a talk about how you can use technology in Jordanian classrooms.
- a whiteboard as a computer screen.
- 5- many classroom now use
- 6- teachers can show websites on the board in front of the class. Teachers can then use the internet to show educational programs, play educational games, music, recordings of languages, and so on.
- 7-they can show educational programs, play educational games, music, recordings of languages, and so on.
- 8- teachers can show websites on the board in front of the class
- 9- to show educational programs, play educational games, music, recordings of languages, and so on.
- 10- educational programs and play educational games
- 11-teachers
- 12- many classroom now use a whiteboard as a computer screen
- 13- As a consequence, teachers can show websites on the board in front of the class.
- 14- students can use the tablets to do tasks such as showing photographs, researching information, recording interviews and creating diagrams.
- 15- because students can do many tasks such as showing photographs, researching information, recording interviews and creating diagrams. I think this will help them in learning.

## The Internet of Things

### انترنت الأشياء

#### A What is the 'internet of Things'?

Everyone knows that the internet connects people, but now it does more than that – it connects objects, too. These days, computers often communicate with each other, for example, your TV automatically downloads your favourite TV show, or your 'sat nav' system tells you where you are. This is known as the 'Internet of Things', and there's a lot more to come.

يعرف الجميع بأن الانترنت يربط الناس بعضها ولكن الأن أصبح يفعل أكثر من ذلك- أصبح يربط الأشياء أيضا. هذه الأيام أصبحت الحواسيب غالباً تتوصل ببعضها على سبيل المثال سيحمل تلفازك آلياً برنامجك المفضل ونظام الملاحة سيخبرك أين أنت بالتحديد. ويعرف هذا بـ انترنت الأشياء وهنالك المزيد ليحدث.

#### B An easy life!

In just a few years' time, experts say that billions of machines, will be connected to each other and to the internet. As a consequence, computers will increasingly run our lives for us. For example, your fridge will know when you need more milk and add it to your online shopping list, your windows will close if it is likely to rain; your watch will record your heart rate and email your doctor; and your sofa will tell you when you need to stand up and get some exercise!

في غضون سنوات قليلة يقول الخبراء أن مiliارات الآلات سترتبط ببعضها وبالأنترنت. وبالتالي ستدير الحواسيب حياتنا عنا بشكل متزايد. على سبيل المثال ستخبرك الثلاجة عندما تحتاج إلى المزيد من الحليب وستضيفه إلى لائحة التسوق الإلكتروني خاصتك وستغلق نافذتك إذا كان المطر محتملاً وساعتك ستسجل معدل نبضات قلبك وترسلها إلى طبيبك وكنتك ستدرك عندما يجب عليك التحرك بأن تنهمض وتمارس الرياضة.

#### C An frightening future.

Many people are excited about the 'Internet of Things'. For them, a dream is coming true. They say that our lives will be easier and more comfortable. However, **others** are not so sure. They want to keep control of their own lives and their own things. In addition, they wonder what would happen if criminals managed to access their passwords and security settings. The dream could easily become a nightmare!

الكثير من الناس متحمسين لفكرة انترنت الأشياء. بالنسبة لهم أنه حلم يصبح حقيقة. يقولون بأن حياتهم ستصبح أسهل وأكثر راحة. ولكن الآخرون ليسوا متأكدين. يريدون أن يبقوا مسيطرين على حياتهم وأشيائهم. بالإضافة إلى ذلك يتسائلون ماذا سوف يحدث إذا استطاع المجرمين الوصول إلى كلماتهم السرية واعدادات الأمان. الحلم بسهولة يمكن أن يتحول إلى كابوس.

**SB 8****اسئلة واجابات الكتاب****11- Read the article once more, then answer the questions.**

1- What does the 'Internet of Things' mean? Give an example from the text.

It means the connection between different computers for example, TV downloads and sat nav.

2- Find two words in the first paragraph which have the same meaning as 'speak to'.

Communicate

3- How will the 'Internet of Things' help you to keep fit, according to the text?

your watch will record your heart rate and email your doctor; and your sofa will tell you when you need to stand up and get some exercise!

4- What does the word 'others' in **bold** in the third paragraph refer to?

other people with different opinion.

5- According to the text, why are some people excited about the future? Why are others worried?

Some people are excited about the future because our lives will be easier and more comfortable. But others are worried They want to keep control of their own lives and their own things.

6- In your opinion, is the 'Internet of Things' exciting or worrying? Why?

In my opinion, it is excited because everything will be easy and comfortable for me

## ADDITIONAL QUESTIONS

### اسئلة اضافية

- 1- What is the meaning of 'Internet of Things'?
- 2- What does everyone know?
- 3- there are many thing that can be done by the internet of things. Write down two of them.
- 4-What does experts say?
- 5- experts say that billions of machines, will be connected to each other and to the internet. When?
- 6-Which will increasingly run our lives ?
- 7-Quote the sentence which indicates that computers will run our lives?
- 8-According to the text, your future fridge can do two things. Write them down.
- 9-watches in the future can help people in two ways. write down these two ways.
- 10-In the future, sofa will give people two pieces of advice. Write down them.
- 11- Experts say that computers will increasingly run our lives. Give two examples
- 12- Write down the sentences which indicates that a lot of people are satisfied with the " internet of things"
- 13-Mny people who are excited about the internet of things believe that our lives will see two positive effects. Write them down.
- 14- quote the sentence which indicates that not all people sure about the benefits of the "internet of things"
- 16- Criminals can commit two crimes by using the "internet of things. Write down them.

## ANSWERS

- 1- It means the connection between different computers
- 2-Everyone knows that the internet connects people and objects .
- 3- Your TV automatically downloads your favourite TV show, or your 'sat nav' system tells you where you are.
- 4- Experts say that billions of machines, will be connected to each other and to the internet.
- 5- In just a few years' time
- 6-Computers
- 7- Computers will increasingly run our lives for us.
- 8- Your fridge will know when you need more milk and add it to your online shopping list
- 9- Your watch will record your heart rate and email your doctor
- 10- Sofa will tell people when they need to stand up and get some exercise!
- 11- Your fridge will know when you need more milk and add it to your online shopping list, your windows will close if it is likely to rain; your watch will record your heart rate and email your doctor; and your sofa will tell you when you need to stand up and get some exercise!
- 12- Many people are excited about the 'Internet of Things'.
- 13- Our lives will be easier and more comfortable.
- 14- However, others are not so sure.
- 15- They want to keep control of their own lives and their own things. In addition, they wonder what would happen if criminals managed to access their passwords and security settings.
- 16- Criminals managed to access their passwords and security settings.

# MODULE

## TWO

# HEALTH

### Text One SB- p. 14:

#### Complementary medicine: is it really a solution?

Most doctors used to be skeptical about the validity of homoeopathy, acupuncture and other forms of complementary medicine. If patients wanted to receive this kind of nonconventional treatment, **they** used to have to consult a private practitioner **who** was likely not to have a medical degree. However, in recent years, the perception of this type of treatment has changed.

These days, many family doctors study complementary medicine alongside conventional treatments, and many complementary medicine consultants also have medical degrees.

لطالما كان الأطباء متشككون بصحة الطب البديل (طب الأعشاب والطب التقليدي) مثل علاج الوخذ بالابر واسكان اخرى من الطب المكمل. وإذا اراد المرضى تلقى هذا العلاج الغير تقليدي فقد اعتادوا ان يستشروا من يمارسوا هذا الطب وهم على الأغلب لا يملكون شهادة طب. على اية حال، في السنوات الاخيرة اختلف مفهوم هذا النوع من العلاج وفي هذه الابام الكثير من اطباء العائلة يدرسون العلاج التكميلي بالإضافة الى العلاج التقليدي. وايضا الكثير من مستشاري العلاج التكميلي يملكون شهادات طبية.

Whereas critics used to say that there was no scientific evidence that non-conventional treatments actually worked, now it is more common for medical experts to recognise that conventional medicine may not always be the only way to treat an ailment.

وبينما اعتاد النقاد على الادعاء بأنه لا يوجد دليل علمي على نجاح الطب التكميلي فمن الشائع الأن لخبراء الطب الاعتراف بأن الطب العادي ليس الطريقة الوحيدة لعلاج الامراض الخفيفة.

At a surgery in London, 70 per cent of patients **who** were offered the choice between a herbal or a conventional medicine for common *complaints* such as insomnia, arthritis and migraines chose the herbal remedy. Fifty per cent of patients then said that the treatment helped. One doctor said, "I now consider homoeopathy to be a viable option for many different conditions, including anxiety, depression and certain allergies. It provides another option when conventional medicine does not address the problem adequately."

في احد عيادات الجراحة في لندن 70% من المرضى عرض عليهم الخيار بين العلاج بالاعشاب او الطب العادي للامراض الشائعة مثل الارق، التهاب المفاصل والشتيفقة (الصداع النصفي) واختاروا علاج بالاعشاب. ولاجقا صرخ 50% من المرضى بأن العلاج ناجح. وقال احد الاطباء انا الأن اخذ بعين الاعتبار ان الطب البديل/التكميلي هو خيار ناجح في العديد من الظروف بما فيها الفرق والاكتئاب والحساسية. وهو يوفر خيار اخر عندما لا ينفع الطب التقليدي بشكل مناسب.

However, complementary medicine cannot be used for all medical treatments. **It** can never substitute for immunisations as **it** will not produce the antibodies needed to protect against childhood diseases. **It** also cannot be used to protect against malaria.

على اية حال فإن العلاج التكميلي لا يمكن استخدامه لجميع انواع العلاجات. فهو لا يمكن له ابدا ان يكون بديل العلاجات الاستطبافية. فهي لا يمكن ان تحل محل التطعيمات التي تحتاج للحماية ضد امراض الطفولة. ولا يمكن ايضا ان تستخد العلاج ضد الملاريا.

One doctor said, "I will always turn to conventional medical treatment first to ensure that no underlying condition is missed. However, the idea of complementary treatments is no longer an alien concept. In my opinion, it should work alongside modern medicine, and not against it."

وقال طبيب اخر: "انا دائمًا سوف الجى الى الطب العادي لأنك أنت لا يوجد شئ خفي. وفكرة العلاج التكميلي لم تعد مفهوم غريب. حسب رأيي يجب ان ترافق العلاج الحديث وأن لا تعارضه".

### اسئلة الكتاب

#### 4 / SB, page 15 :

**Listen to and read the article again, and decide if these sentences are true or false. Correct the false sentences.**

1. Doctors and patients didn't use to be convinced that complementary forms of medicine work. ....

2. Nowadays, many doctors study complementary forms of treatment.

.....

3. At the surgery mentioned in the article, the majority of patients found that the herbal remedy did not help them.

.....

4. Complementary medicine can work as a replacement for immunisations or to treat malaria.

.....

.....

#### 4 / SB, page 15 :

**Answer the following questions about the article.**

1 The article suggests that people's perception of complementary medicine has changed over time. Why do you think this is the case?

.....  
.....  
.....  
.....

2 "Complementary treatments ... should work alongside modern medicine, not against it." Explain this statement in two sentences, justifying your answer with examples from the article.

.....  
.....  
.....  
.....

### COMPREHENSION TEST

1. There are many forms of complementary medicine. Write down two of them.

.....

2. Write down the sentence which indicates that many doctors study complementary forms of treatment.

.....  
.....  
.....  
.....

**3. Non-conventional medicine cannot work as a replacement for some treatments.  
Write down two of them.**

.....  
.....  
.....  
.....

**4. Doctors always turn to conventional treatment first. Why do they do that?**

.....

.....

**5. Quote the sentence which indicates that people didn't use to study  
complementary medicine formally.**

.....  
.....  
.....

**6. Find a word in the text which means “illness”.**

.....  
.....

**7. What does the underlined word in the second paragraph “arthritis” mean?**

.....

.....

**8. What do the underlined words ( pronouns ) refer to ?**

.....

.....

**9 Some people believe that homoeopathy is not a valid alternative to conventional  
Medicine and it can't be effective . Explain this statement , suggesting three bad  
effects for this kind of treatment.**

.....  
.....  
.....  
.....

.....

**10. Complementary medicine can't replace modern medicine. Think of this  
statement, and in two sentences, write down your point of view.**

.....  
.....  
.....  
.....

**Unit Two Text Two SB- p.16:**  
**Are happier people healthier – and, if so, why?**  
**هل الأشخاص السعداء أكثر صحة وإذا نعم لماذا؟**

It's normal to feel a bit blue from time to time. However, studies show that negative emotions can harm the body.

من الطبيعي الشعور بالحزن من وقت لآخر وبينت الدراسات بأن المشاعر السلبية يمكن أن تؤذى الجسد.

Anger can also have harmful effects on health. When you see red, your blood pressure is raised and you can suffer from headaches, sleep problems and digestive problems. However, what about positive feelings and attitudes? Until recently, scientists had not investigated whether there is a link between positive feelings and good health.

ويمكن ان يؤثر الغضب سلبا على الصحة. عندما تغضب يرتفع معدل ضغط الدم لديك ويمكن ان تتعاني من صداع ومشاكل في النوم والهضم. ولكن ماذا عن المشاعر والمواقف الأيجابية؟ حتى مؤخرا لم يتحقق العلماء اذا كان هنالك صلة بين المشاعر الأيجابية والصحة الجيدة.

Then, in a study **that** had followed more than 6,000 men and women aged 25 to 74 for 20 years, researchers found that positivity reduced the risk of heart disease. Other factors influencing health included a supportive network of family and friends, and an optimistic outlook on life.

ولاحقا في دراسة شملت أكثر من 6000 رجل وامرأة تتراوح اعمارهم بين 25 و 74 سنة لمدة 20 عام، وجد الباحثون بأن الايجابية تقلل مخاطر امراض القلب. عوامل أخرى تؤثر في صحة القلب تتضمن شبكة عائلية واصدقاء داعمة ونظرة ايجابية للحياة.

The research showed that children **who** were more able to stay focused on a task, and **who** had a more positive attitude to life at age seven, were usually in better health 30 years later. The

study has been controversial. Some health professionals believe that bad lifestyle choices, such as smoking or lack of exercise, are the reason for heart disease and other illnesses, and not an individual's attitude. The researchers, while agreeing, raise the question: why are people making

bad lifestyle decisions? Do more optimistic people make better and healthier lifestyle choices?

وبيّنت البحوث بأن الأطفال الذين استطاعوا البقاء مركزين أكثر على الوظائف والذين يملكون موقف إيجابي عند عمر السابعة كانوا عادة في صحة أفضل بعد 30 عاما. لقد كانت الدراسة جدلية. ويعتقد بعض المختصون بالصحة بأن خيارات الحياة السيئة مثل التدخين وتقص التمارين الرياضية هي أسباب أمراض القلب والأمراض الأخرى وليس المواقف الفردية. وبموافقة الباحثون ظهر السؤال التالي: لماذا يقوم الناس باختيارات سيئة لنمط الحياة؟ وهل يقوم الأشخاص المتفائلون باتخاذ قرارات نمط حياة صحية وأفضل؟

The researchers appreciate that not everyone's personal circumstances and environment make it possible to live without worry. However, **they** believe that if we teach children to develop positive thinking, and to 'bounce back' after a setback, these qualities will improve **their** overall

health in the future.

ويثمن الباحثون بأنّ ليست بيئه وظروف كل شخص تجعل من الممكن العيش بدون فلق. على كل حال يعتقدون بأننا اذا علمنا الأطفال تطوير تفكير ايجابي وأن ينهاضوا بعد كل سقوط فإن هذه الصفات سوف تحسن الصحة الأجمالية في المستقبل.

1/ SB, page 16 :

**Work in small groups. Discuss these questions and share your ideas.**

**1. Do you ever feel yourself getting angry? What kind of things can make you angry?**

.....

**2. Do you think that feeling angry is bad for you?**

.....

2 / SB, page 16 :

**In pairs, discuss the question in the title of the article. What are your opinions? Read the article and consider your opinion again.**

.....

3/ SB, page 16 :

**Read the article again and answer the questions.**

**1. What are the possible effects of anger and stress on someone's health?**

.....

**2.What is controversial about the researchers' study?**

.....

**3.What is your opinion of the researchers' findings?**

.....

.....

4 / SB, page 19 :

**- What feeling does each of the idioms in bold from the text refer to?**

**A. happiness B. sadness C. fear D. anger**

.....

.....

### **COMPREHENSION TEST**

**1. We can improve our children's overall in the future in two ways . Write them down.**

.....

.....

**2. There are some possible effects of anger on someone's health. Write down two of these effects.**

.....

.....

**3. Write down the sentence which indicates that scientists didn't do any research to find any relation between feelings and health in the past.**

.....  
.....  
.....  
**4. Some scientists believe that bad lifestyle choices affect health negatively. Write down two of these choices.**

.....  
**5. Replace the underlined phrase with a suitable phrasal verb that has a similar meaning to it.**

.....  
**6. Find a word in the text which means “**believing that good things will happen in the future**”**

.....  
**7. What do the underlined words ( pronouns ) refer to ?**

.....  
**8. Write three things ,mentioned in the article , that improve health .**

.....  
.....  
**9. The writer thinks that happiness affects health . Explain this statement , suggesting three benefits of happiness on health.**

.....  
.....  
.....  
**10. “He who has health has hope; and he who has hope, has everything” ,by Thomas Carlyle. Think of this statement, and in two sentences, write down your point of view.**

## Unit Two Text Three SB- p.18:

### Health in Jordan: A report

#### Introduction

Health conditions in Jordan are among the best in the Middle East. This is largely due to the country's commitment to making healthcare for all a top priority. Advances in education, economic conditions, sanitation, clean water, diet and housing have made our community healthier.

تعتبر الصحة في الاردن من ضمن الأفضل في الشرق الاوسط. ويعزى هذا الى التزام البلد بجعل العناية الصحية اقصى الاولويات. التعليم المتقدم والاواعض الاقتصادية والصرف الصحي والمياه النقية ونظام الطعام والاسكان جعلت من المجتمع صحيا اكثرا.

#### **A. Healthcare centres**

##### المراكز الصحية

As a result of careful planning, the number of healthcare services has been increasing rapidly over the past years. More than 800 different kinds of healthcare centres have been built, as well

as 188 dental clinics. In 2012 CE, 98 per cent of Jordanian children were fully immunised, thanks to immunisation teams **that** had been working towards this goal for several years. Although there were remote areas of the country **where** people had been without consistent access to electricity and safe water, almost 99 per cent of the country's population now has access.

كنتيجة للتجطيط الجيد فأن عدد الخدمات الصحية قد ارتفع بشكل كبير عبر السنين الماضية. وتم بناء اكثرا من 800 مركز صحي وكذلك 188 عيادة اسنان. في عام 2012 98% من اطفال الاردن تم تأمينهم بشكل كامل والشكر لفريق التأمين الذي كان يعمل من أجل هذا الهدف لعدة سنوات. وعلى الرغم من وجود مناطق ثانية في البلد حيث كان الناس بدون وصول دائم للكهرباء والمياه الآمنة لكن الأن 99% من سكان البلد أصبح لديهم ذلك.

#### **B Hospitals**

##### المستشفيات

Although the country has been focusing mainly on improving **its** primary healthcare facilities, **it** has not neglected **its** advanced medical facilities. The reputation of Jordanian doctors has spread

in the region, and now many more patients come to Jordan for open heart surgery. In Jordan, the open heart surgery programme started in 1970 CE in Amman.

على الرغم من ان البلد كان يركز على تحسين التسهيلات الصحية الأساسية فإنه لم يتوجه تسهيلاته الطبية المتقدمة. وسمعة الأطباء الأردنيين انتشرت في المنطقة واليوم الكثير من المرضى يأتون للاردن من اجل عمليات القلب المفتوحة. وبدأ برنامج جراحة القلب المفتوحة في عمان منذ عام 1970.

#### **C Life expectancy**

The life expectancy figures show that Jordan's healthcare system is successful. In 1965 CE, the average Jordanian's life expectancy was age 50. In 2012 CE, this average life expectancy had risen

to 73.5. According to UNICEF statistics, between 1981 CE and 1991 CE, Jordan's infant mortality

rates declined more rapidly than anywhere else in the world – from 70 deaths per 1,000 births in

1981 CE to only 32 deaths per 1,000 births in 2014 CE.

تبين ارقام متوسط العمر بأن النظام الصحي الأردني هو نظام ناجح. في عام 1965 كان متوسط عمر الإنسان الأردني 50 عاما. في عام 2012 ارتفع معدل متوسط الأنسان إلى 73,5 حسب احصائيات اليونيسف وبين عامين 1981 و 1991 انحدرت مستويات وفيات الأطفال بشكل اسرع من أي مكان اخر بالعالم (من 70 بالالف عام 1981 الى 32 بلالف عام .2014

### **Conclusion**

The low infant mortality rate, as well as the excellent healthcare system, have been contributing

factors to Jordan's healthy population growth, which will result in a strong work force with economic benefits for the whole country.

معدل الولادات المنخفض ونظام الصحة الممتاز كانت عوامل رئيسية في نمو السكان الصحي الأردني والذي سوف ينتج عنه قوى عمل قوية مع فوائد اقتصادية لكل البلد

**3 / SB, page 18 :**

**What do the words in bold from the report mean? Work in pairs.**

1. sanitation : .....
2. dental : .....
3. immunisation : .....
- 4.infant morality : .....
5. workforce:.....

**4 / SB, page 18 :**

**Read the report again and answer these questions.**

**1. What is the title of the report?**

.....

**2. What is the purpose of the sub-headings before different sections?**

.....

**3. What is the link between the introduction and the conclusion?**

.....

**4. Is the language formal or informal? How can you tell?**

.....

### **COMPREHENSION TEST**

**1. There are many factors that made Jordanians healthier. Write down two of them.**

.....

**2. Write down the sentence which indicates that most of Jordanian villages were supplied with electricity and water.**

.....

.....

**3. There are two factors have been contributing to Jordan's healthy population growth.**

**Write them down.**

.....

**4. What kind of medical operation has Jordan made the most success?**

.....  
**5. What was the life expectancy in Jordan in 1965 and 2012?**  
.....

.....  
**6. Quote the sentence which indicates that Jordanian doctors have been well-known in the region .**  
.....

.....  
**7. Find a word in the report which means “ decreased in quantity or importance”**  
.....

.....  
**8. What do the underlined words ( pronouns) refer to ?**  
.....

.....  
**9.The writer states that children in Jordan are vaccinated against many illnesses. Explain this statement , mentioning three kinds of these illnesses.**  
.....

.....  
**10. Health conditions in Jordan are among the best in the Middle East. Explain this statement and , in two sentences , write down your point of view.**  
.....

## AB-p.13

**Unit Two Text Four AB: Get moving****A growing problem:**

In many countries, an increasing number of young people and adults are overweight or even obese. One reason for this is the growing popularity of fast food, **which** didn't use to be as common as it is now. (1) Another big factor is lack of exercise. People would often walk to school or work, but these days many more of us drive. Modern technology has also played **its** part; we spend more and more time focusing on computer screens. Before the Internet was invented, nobody had dreamt of online shopping, but now we can buy almost anything without leaving the sofa.

في كثير من البدان هنالك عدد متزايد من الشباب والبالغين اللذين يعانون من الوزن الزائد ومرض السمنة المفرطة. واحد اسباب هذه الظاهرة هو ازدياد شعبية الوجبات السريعة واللتي لم تكن شائعة كما هي الان. وعامل اخر هو نقص التمرين. اعتاد الناس المشي الى المدرسة او العمل ولكن هذه الأيام الكثير منا يقودون. ولعبت التكنولوجيا الحديثة دورها فنحن نمضي المزيد والمزيد من الوقت امام شاشات الحواسيب. قبل اختراع الانترنت لم يحلم احد بالتسوق عبر الانترنت ولكن الان نستطيع تقريبا شراء اي شيء بدون ان نترك الكتبة.

**B- Time to listen**

Health experts have been warning about this trend for years, and **their** advice is clear. Adults should aim to exercise for at least two and a half hours every week; for children and teenagers the target should be at least an hour a day. This might not sound very much. However, recent research shows that less than 50% of the British population manages this. (2) School children are less physically active than **they** used to be. Girls in particular often dislike PE. This can lead to serious health problems.

خبراء الصحة يذرون من هذه النزعة منذ سنوات ونصيحتهم واضحة. على البالغين أن يتبرأوا على الأقل ساعتين ونصف كل أسبوع وللبالغين والأطفال فوقهم هو ساعة على أقل في اليوم. وقد لا يبدو هذا كثيرا ولكن الدراسات الحديثة بيّنت بأن أقل من 50% من الشعب البريطاني يقوم بهذا. وطلاب المدارس هم أقل نشاط بدنيا مما كانوا عليه. والفتيات على وجه الخصوص لا يحبن التمارين البدنية. وهذا يؤدي إلى مشاكل صحية خطيرة.

**C- It's good for you!**

Experts recommend a mixture of activities. **These** should include moderate exercise, such as fast walking, and more strenuous exercise, like running. (3) **They** also advise exercise **that** strengthens the muscles, for example sit-ups. The more muscle we build, the more calories we burn, and the fitter we become. In

addition, exercise is a great way to cope with stress. In a recent study, patients who had been suffering from depression reported a great improvement after increased physical activity.

يوصي الخبراء بمزيج من النشاطات. وهذه النشاطات تحتوي على نشاطات معدلة مثل المشي السريع وتمرين حيوية أكثر مثل الركض. ويوصون أيضاً بالتمارين التي تقوى العضلات مثل تمرين الضغط. وكلما بنينا العضلات كلما حرقنا السعرات الحرارية أكثر والأكثر متناسقاً أصبعنا. بالإضافة إلى ذلك فالتمارين طريقة رائعة للتأقلم مع التوتر. وفي دراسة أجريت مؤخراً أفادَ مرضى يعانون من الاحباط بتحسين كبير بعد زيادة النشاط الجسدي لديهم.

#### D- Useful tips

Of course this raises a question: how can I manage to fit in all this extra exercise? The best way is to build it into our daily lives so that it becomes a routine. (4) It doesn't have to take much extra time. You could get off the bus one stop earlier than usual, or stand up when you're on the phone! Most importantly, we should find a sport **that** we enjoy doing. That way, we will all become fitter, healthier and happier.

وبالطبع هذا يطرح سؤالاً: كيف استطيع أن اتدبر أمرِي لأصبح متناسقاً مع كل هذه التمارين الزائد؟ وأفضل طريقة هو بناء هذه التمارين في حياتنا اليومية بحيث تصبح روتين. ويجب أن لا تستغرق الكثير من الوقت. تستطيع أن تنزل من الباص قبل المكان المقصود أو قف وانت تتكلم على الهاتف. الأهمية هو ان تجد رياضة تستمتع بممارستها. بذلك الطريقة سوف تصبح متناسقين بدنياً أكثر صحة وسعادة

**10/ WB, page 13 :**

**Answer the following questions.**

**1. According to the article, what are the main reasons for higher rates of obesity?**

.....  
.....  
.....

**2. What is the minimum amount of exercise recommended for someone in your age group?**

.....

**3. Do most British people get enough exercise? Which sentence in the article tells you this?**

.....

**4. Guess the meaning of the highlighted word in paragraph C. Then check in a dictionary.**

.....

**5. The author suggests some ways of including exercise in our normal lives. Give two examples from the article.**

.....  
.....

**COMPREHENSION TEST**

**1.** An increasing number of young people and adults are overweight or obese because of many factors. Write down two of them.

.....  
.....  
.....

**2.** There are two types of the exercise. Write them down.

.....  
.....

**3.** Write down the sentence which indicates that physical exercise help in treating stress.

.....  
.....

**4.** What does the underlined word “**obese**” in the first paragraph, mean?

.....

**5.** What do the underlined words “pronoun” refer to?

.....

**6.** Quote the sentence which indicates that you can buy things while lying on the couch?

.....  
.....  
.....

**7.** What do girls usually refuse and what does that lead to?

.....  
.....

**8.** Replace the underlined phrase **deal successfully with** with suitable phrasal verb that has a similar meaning to it .

.....

**9.** The writer states that an increasing number of young people and adults are overweight or even obese. Explain this statement , suggesting three ways to overcome this problem.

.....  
.....  
.....

**10.** Fitness leads to health. Think of this statement and , in two sentences , write down your point of view.

.....  
.....  
.....  
.....

# UNIT THREE

# MEDICAL

# ADVANCES

## SB. p20

### Young Emirati inventor is going to travel the world

**مخترع اماراتي شاب سوف يجوب العالم**

\*Ten-year-old Adeeb al-Balooshi, from Dubai, is going to travel to seven countries on a tour which has been organised and funded by Sheikh Hamdan bin Mohammad, Crown Prince of Dubai.

عادل البلوشي صبي يبلغ من العمر عشر سنوات من دبي سوف يزور سبع دول في جولة منظمة ومدعومة من قبل الشيخ حمدان بن محمد أمير دبي.

The boy caught Sheikh Hamdan's attention with his invention – a prosthetic limb for his father. The Sheikh has taken a special interest in the boy, and hopes the tour that he is sponsoring for Adeeb will give the young inventor more

self-confidence and inspire other young Emirati inventors. Adeeb got the idea for a special kind of prosthetic leg while he was at the beach with his family. His father, who wears an artificial leg, could not swim in the sea as he could not risk getting his leg wet. This inspired Adeeb to invent a waterproof prosthetic leg.

وأثار الصبي انتباه الشيخ حمدان باختراعه عضو اصطناعي لوالده. واصبح لدى الشيخ اهتمام خاص بالولد وأمل الشيخ بأن يمنح تبرعه اديب المخترع الصغير المزيد من الثقة بالنفس ويلهم المخترعين الأمارتين الصغار. ولعمت فكرة القدم الاصطناعية لدى اديب اثناء تواجده على الشاطئ مع عائلته. فوالده الذي يرتدي قدم صناعية لا يستطيع السباحة بالبحر لأنه لا يستطيع المخاطرة بتبليل قدمه. وهذا ما اهل اديب باختراع قدم صناعية مقاومة للماء.

Adeeb is going to visit the USA, France, the UK, Ireland, Belgium, Italy and Germany, where he will be staying with relatives. However, while he is in Germany, Adeeb will not be spending all his time sightseeing. He will be working with a specialist doctor to build the appendage. He will also be attending a course on prosthetics and learning about different kinds of medical apparatus.

سوف يزور اديب الولايات المتحدة وفرنسا والمملكة المتحدة وايرلندا وبلجيكا واسيطاليا والمانيا حيث سيقيم مع الأقارب. على اية حال بينما هو في المانيا لن يمضي وقته بمشاهدة الماكن بل سيعمل مع طبيب مختص لبناء العضو الصناعي. وسيحضر دورة عن الأعضاء الصناعية ويتعلم عن الأنواع المختلفة من الأجهزة الطبية.

Adeeb has invented several other devices, including a tiny cleaning robot and a heart monitor, which is attached to a car seat belt. In the case of an emergency, rescue services and the driver's family will be automatically connected with the driver through this special checking device.

واخترع اديب العديد من الأجهزة الأخرى من ضمنها رجل آلي صغير للتنظيف ومراقب للقلب والذي يتم وصله بحزام الأمان للسيارة. وفي حالة الطوارئ يتم توصيل فريق الطوارئ والعائلة بالسائق عبر اداة التدقيق هذه.

He has also invented a fireproof helmet. This special equipment, which has a built-in camera system, will help rescue workers in emergencies. It is for these reasons that Adeeb rightly deserves his reputation as one of the youngest inventors in the world.

واخترع ايضا خوذة مضادة للنيران. وتحتوي هذه الأداة الخاصة على نظام كاميرا مدمجة والذي يساعد في انقاذ العمال في حالات الطوارئ. ولهذه الأسباب تحديدا يستحق اديب شهرته كأحد اصغر المخترعين في العالم

4 / SB, page 21 :

**Listen to and read the newspaper article again and answer the questions.**

1. Why was Sheikh Hamdan interested in helping Adeeb? Why did he offer Adeeb the gift of a world tour?

.....  
.....  
.....

2. How did Adeeb get his inspiration for a waterproof prosthetic leg?

.....  
.....  
.....

3. Who will Adeeb be staying with in Germany, and what will he be doing there?

.....  
.....  
.....

4. What does the suffix *-proof* mean (*waterproof*, line 15; *fireproof*, line 30)?

.....  
.....  
.....

5. What is the purpose of the in-car heart monitor? Why do you think that it is built into the seat belt?

.....  
.....  
.....

1. Apart from prosthetic leg , there were other inventions made by Adeeb. Write down two of them.

.....  
.....  
.....

2. There are two aims ( reasons ) behind the sponsorship of Adeeb by Sheikh Hamdan bin Mohammad. Write them down.

.....  
.....  
.....

3. Write down the sentence which indicates that Adeeb won't only go to Germany for tourism.

.....  
.....  
.....

4. Adeeb will do many things in Germany during his tour. Write down two of them.

.....  
.....  
.....

5. Adeeb has invented a fireproof helmet for a special purpose. Write it down.

.....  
.....  
.....

6. Find a word in the text which means “**arm or leg of a person**”.

.....  
.....  
.....

7. What does the underlined word ”**prosthetic**” in the second paragraph, mean?

.....  
.....  
.....

8. What do the underlined words (pronouns) refer to?

.....  
.....  
.....

9. The writer states that sponsoring inventors is a very noble matter. Explain this statement , suggesting three ways of sponsoring those genius people.

.....  
.....  
.....

10 . Adeeb rightly deserves his reputation as one of the youngest inventors in the world. Think of this statement and , in two sentences, write down your point of view.

**SB. p22****IN THE FUTURE****We will be able to have an operation to increase our intelligence.**

Scientists have already developed brain implants that improve vision or allow disabled people to use their thoughts in order to control prosthetic limbs like arms, legs or hands, or operate a wheel chair. In 2012 CE, research on monkeys showed that a brain (1) implant improved their decision-making abilities. How will humans benefit from this research? Scientists hope to develop a similar device to help people who have been affected by brain damage, which could be caused by (2) dementia, a stroke or other brain injuries.

سنتمكن من اجراء عملية لزيادة ذكائنا . وقد قام العلماء بتطوير غرسات دماغية تحسن الرؤيا او تسمح للناس المعاقين باستخدام افكارهم للتحكم بالأعضاء الصناعية مثل الأذرع والأقدام والأيدي او تشغيل الكرسي المتحرك. في عام 2012 م أظهرت البحوث على القردة التي خضعت لغرسات دماغية تحسن في قدرات اتخاذ القرار. اذا كيف سيسفيد البشر من هذا البحث؟ يأمل العلماء بتطوير اداة مشابهة لتساعد الناس الذين تعرضوا للعطل دماغي والذي يمكن ان يسبب الخرف، السكتة الدماغية او الاصابات الدماغية الأخرى.

**Doctors will be able to communicate with people in a coma.**

In 2010 CE, neuroscientists confirmed that it was possible to communicate with some patients in a coma, by using a special brain (3) scanner Called an MRI. They suggested that, in the future, more meaningful dialogue with patients in a coma would be possible. Two years later, it has finally happened. The scanner, used on a man who has been in a coma for more than twelve years, proves that he has a conscious, thinking mind – a fact that had previously been disputed by many. Doctors plan to use similar brain-scanning techniques in the future to find out whether patients are in pain, or what they would like to be done in order to improve their quality of life.

سيتمكن الأطباء من التواصل مع مرضى الغيبوبة. في عام 2012م أكد علماء الأعصاب بأن التواصل مع بعض مرضى الغيبوبة ممكن عن طريق استخدام ماسح دماغ خاص يدعى ام ار اي. واقترحوا انه بالمستقبل سيكون الحوار ذو معنى أكبر مع مرضى الغيبوبة سيكون ممكن. بعد سنتين حدث اخيرا ذلك. ثبت الماسح المستخدم على رجل في غيبوبة منذ 12 عام بأنه لديهوعي وعقل يفكر - حقيقة كانت مجال للشك من قبل الكثيرين. ويخطط الأطباء لاستخدام اساليب ماسح الدماغ في المستقبل لمعرفة اذا كان المرضى يتلقون او ماذا يريدون أن يفعل لأجلهم لتحسين نوعية حياتهم.

**A new drug will help to treat certain types of cancer almost instantly.**

A new cancer drug is being trialled in Plymouth, UK, which doctors hope will extend the lives of cancer patients and reduce their symptoms overnight. It is taken as a single (4) pill **every** morning, and so far patients have shown none of the usual (5) side effects **such** as the sickness and hair loss that are experienced when undergoing other forms of cancer treatment. The new treatment works by blocking a protein which causes cancerous cells to grow. It will improve patients' life

expectancy and quality of life much more quickly than any other treatment. The patients were interviewed a year after starting the treatment and are fit and well, saying that they are definitely going to continue the trial. They have every reason to believe the new drug is going to work. Doctors at Plymouth Hospital hope that it will help patients from all over the world.

نوع جديد من الأدوية سيساعد في علاج أنواع معينة من السرطان على الفور. دواء جديد للسرطان يتم اختباره في بليموث في المملكة المتحدة ويأمل الأطباء بأن يطيل حياة مرضى السرطان ويقلل من اعراضه في ليلة واحدة. ويفيد كحبة دواء واحدة كل يوم حتى الآن لم يبدي المرضى أي من الأعراض الجانبية مثل الدوار وتساقط الشعر والذي يعانون منه عندما يخضعون لأشكال العلاج السرطان الأخرى. ويعمل العلاج عن طريق حجب البروتين الذي يسبب نمو الخلايا السرطانية. وسيحسن من معدل اعمار المرضى بشكل أسرع بكثير من أي دواء آخر. وتمت مقابلة المرضى بعد عام من بدء العلاج وكانوا بصحة جيدة و قالوا أنهم بالتأكيد سكملون العلاج التجاري. ولديهم كل الحق ليؤمنوا بأن العلاج سوف ينجح. ويأمل الأطباء في مستشفى بليموث أن هذا العقار سيساعد المرضى حول العالم.

**4 / SB, page 23 :**

**Look at the third sub-heading in the article. How far do you think this is true?**

**Give reasons.**

.....  
.....  
.....  
.....  
.....

**5 / SB, page 23 :**

**Make correct sentences about the future.**

1. He / hope / become a teacher one day.

.....

2. I / intend / apply for a job when I finish university.

.....

3. Many hospitals / plan / use robots to help nurses in the future.

.....

4. How / you / intend / solve the problem?

.....

5. Our school / hope / raise enough money to build a new library.

.....

6. you / intend / buy tickets for the play?

.....

#### **COMPREHENSION TEST**

1. Scientists have developed brain implants for two purposes. Write them down.

.....  
.....

2. Write down the sentence which indicates that experts are carrying out tests on a new cancer drug that may saves lives of patients.

.....  
.....

3. Usual cancer treatment has had some side effects . Write down two of them.

.....

4. There are three reasons mentioned in the text that damage brain. Write them down .....

5. Find a word in the text which means “**a medicine or a substance used for making medicines**”

.....  
6. What does the underlined word “ **pill** ” in the last paragraph mean ?

.....  
7. Why do neuroscientists use a special brain scanner called “ **MRI** ”

.....  
8. What do the underlined words “ **pronouns** ” refer to ?

.....  
9.The writer states that there will be many implications for the world if people live longer due to improving life expectancy. Explain this statement , mentioning three bad consequences for the increasing number of population.

.....  
10.Patients who suffer from cancer will agree to undergo new types of treatment . Think of this statement and , in two sentences, write down your point of view.

## The King Hussein Cancer Center

### مركز الملك الحسين لمعالجة السرطان

The King Hussein Cancer Center (KHCC) is Jordan's only comprehensive cancer treatment centre. It treats both adult and paediatric patients. As the population of the country increases, more and more families will rely on the hospital for cancer treatment. Patients come not only from Jordan but also from other countries in the region, as they are attracted by its excellent reputation, lower costs, and cultural and language similarities.

يعتبر مركز الحسين للسرطان الشامل الوحيد في الأردن للمعالجة السرطان. ويعالج المرضى الكبار والأطفال. وبما أن عدد السكان يرتفع سيعتمد المزيد والمزيد من العائلات على المركز لمعالجة السرطان. ويأتي المرضى ليس فقط من الأردن بل أيضاً من الدول المجاورة وتجذبهم سمعته الجيدة والأجور المنخفضة والتشابه الثقافي واللغوي.

In order to cope with the increase in demand for treatment, the KHCC has begun an expansion programme. Building started in 2011 CE . The hospital will have more than doubled its capacity by 2016 CE, increasing space for new cancer cases from 3,500 per year to 9,000.

ولكي يتآقلم مع الأزدياد في طلب العلاج بدءاً من 2011. وبحلول عام 2016 سيتوسع المركز أكثر من ضعفي العدد وزيادة المجال من 3500 حالة في السنة إلى 9000.

By then, they will have added 182 extra beds, along with bigger units for different departments, including radiotherapy. New adult and pediatric wards will have opened. Additionally, they will have built a special ten-floor outpatients' building, with an education centre which will include teaching rooms and a library.

عندما سكونوا قد أضافوا 182 سريراً إضافياً مع وحدات أكبر لأقسام مختلفة تتضمن العلاج بالأشعة. جناح البالغين والأطفال الجديد سوف يتم افتتاحه. بالإضافة، سوف يقومون ببناء خارجي للمرضى من عشرة طوابقية مركز تعليمي يحتوي على غرف تعليمية ومكتبة.

Many cancer patients live far away from Amman, where the KHCC is located, and the journey to and from the hospital is often difficult. For this reason, there are plans to extend cancer care facilities to other parts of Jordan. In the near future, King Abdullah University Hospital in Irbid hopes to set up radiotherapy machines, so that cancer patients from northern Jordan will not have to go to Amman for radiotherapy treatment.

العديد من مرضى السرطان يعيشون بعيداً عن عمان حيث يوجد مركز الحسين للسرطان والرحلة من وإلى المركز غالباً صعبة. ولهذا السبب هنالك خطط لنشر منشآت العناية بالسرطان إلى أجزاء أخرى من البلاد. في المستقبل القريب يأمل مستشفى الملك عبدالله في إربد في تركيب الآلات العلاج بالأشعة لكي يخدم مرضى السرطان من شمال الأردن ولا يضطر المرضى للذهاب إلى عمان للعلاج بالأشعة.

1 / SB, page 24 :

**Read the following information and discuss the questions.**

**The population of Jordan increased from approximately 2.3 million in 1980 CE to about 6.5 million in 2010 CE. It is expected that the population will keep on increasing, and by 2050 CE it will be about 11.5 million.**

1. How do you think this increase in population will affect Jordan's housing, education and health facilities?

.....  
.....  
.....

2. What can be done to help Jordan cope with this increase in population?

.....  
.....  
.....

4 / SB, page 25 :

**Read the article again and answer the questions.**

1. Why does the hospital need to expand?

.....  
.....

2. Give three reasons why patients from other countries visit the centre.

.....  
.....

3. What is one of the disadvantages of the KHCC for patients who live far from Amman?

.....  
.....

4. What plans are there for increasing cancer care facilities in other parts of Jordan?

.....

### **COMPREHENSION TEST**

1. Patients from other countries visit the KHCC for many reasons. Write down two of them.

.....  
.....

2. Write down the sentence which indicates that The KHCC treats people from all ages.

.....

3. How many cancer cases is the hospital expected to treat after completion of its expansion?

.....

4. What is the main difficulty do cancer patients who live outside Amman face?

.....

5. Read the quotation. "Wherever the art of Medicine is loved, there is also a love of Humanity. Hippocrates (460 BCE–370 BCE) Do you agree with it? Why/Why not?"

.....

6. Write down the sentence which indicates that Jordan has one cancer centre.

.....

7. What do the underlined words ( pronouns ) refer to ?

.....

8. What does the underlined word **expansion** in the second paragraph mean?

.....

**9. The writer states that Jordan has a great reputation in the area of medicine. Explain this statement , mentioning three reasons why health conditions in Jordan are advanced .**

.....  
.....  
.....  
.....

**10. The King Hussein Cancer Center is an important facility that contributes to medical tourism . Think of this statement and , in two sentences, write down your point of view.**

.....  
.....  
.....  
.....

## Read the article below and choose the best title.

A- Accident victim invents hand that can feel

B- Accident victim gets amazing new hand

**C- Accident victim tests first artificial limb**

Scientists have successfully invented a prosthetic hand with a sense of touch. It is an exciting new invention, which they plan to develop. It is possible that, in the not-too-distant future, similar artificial arms and legs will have taken the place of today's prosthetic limbs.

نجح العلماء بأختراع يد صناعية تملك حاسة اللمس. ويخططون لتطوير هذا الختراع المدهش. ومن المحتمل في المستقبل غير البعيد أن تحل الأيدي والأرجل الصناعية المشابهة محل الأعضاء الصناعية المستخدمة الأن.

Dennis Sorensen, a 39-year-old from Denmark, was the first person to try out the new invention. After losing his left hand in an accident, he had been using a standard prosthetic hand for nine years. The new hand, which was developed by Swiss and Italian scientists, was a huge improvement. With it, Sorensen could not only pick up and manipulate objects, but he could also feel them. 'When I held an object, I could feel if it was soft or hard, round or square', he explained. He said that the sensations were almost the same as the ones he felt with his other hand.

دينيس سورينسن البالغ من العمر 39 عاماً من الدنمارك كان أول شخص يجرب الختراع الجديد. وبعد خسارة يده الشمال في حادث سير كان دينيس يستخدم يد صناعية عاديّة لتسعة سنوات. واليد الجديدة التي طوره علماء سويسريون وایطاليين كان تحسن هائل. وبها لم يكن سورينسن يلقط الأشياء ويتلاعب بها فقط بل استطاع ايضاً الشعور بها. ويقول " عندما امسك بشئ استطيع الشعور به اذا كان طري او قاس، مربع او مستدير. يقول بأن الشعور مثل الذي يشعر به بيده الأخرى.

Unfortunately, Sorensen was only taking part in trials, and the equipment is not ready for general use yet. He was only allowed to wear it for a month, for safety reasons. So now he has his old artificial hand back. However, he hopes that soon he will be wearing the new type of hand again. He is looking forward to the time when similar artificial limbs are available for the thousands of people who need them. He will have helped to transform their lives.

من سوء الحظ فإن سورينسن كان فقط يشارك في التجارب وأن الأداة ليست جاهزة للاستخدام العام. وسمح له بارتدائها لمدة شهر فقط بداعي السلامة. والآن بدء يستخدم اليد الصناعية القديمة. على كل حال، يأمل قريباً انه سيرتدي النوع الجديد من الايدي. وينتظر بلهفة عندما توفر الأعضاء الصناعية المشابهة لالاف الناس الذين يحتاجونها. وهو سوف يساعد في تغيير حياتهم

10/ WB, page 17 :

**Read the article again and answer the questions.**

1 .Who invented the new prosthetic hand? What is special about it?

.....  
2 Why does Dennis Sorensen need a prosthetic hand?

.....  
3 Which hand is he wearing now? Why?

.....  
4 Who do the bold pronouns 'I' refer to in line 7 ?

.....  
5 Find a word that is the opposite of 'natural' in the first and third paragraphs.

### **COMPREHENSION TEST**

1. Dennis Sorensen could do two things by using the new prosthetic hand. Write them down.

.....  
2.Quote the sentence which indicates the nationalities of the two scientists who developed the new prosthetic hand.

.....  
3. How does the newly –invented prosthetic hand differ from old ones?

.....  
4. Write down the sentence which indicates that in the near future, there is a plan to replace old prosthetic limbs with new developed ones.

.....  
5. Why had Sorensen been using artificial limb?

.....  
6. Find a word in the first paragraph that means **an artificial body part** .

.....  
7. Why can't Sorensen wear his new hand now ?

.....  
8. What do the underlined words ( pronouns) refer to ?

.....  
9.The writer thinks that scientists have developed many new important medical inventions. Explain this statement , mentioning three new inventions that have influenced the patients' life .

.....  
10. The new inventions can improve someone's life . Think of this statement and , in two sentences, write down your point of view.

**MODULE THREE**

**ACHIEVEMENTS**

**UNIT FOUR**

**SUCCESS**

**STORIES**

## The importance of Islamic achievements in history.

**Jabir ibn Hayyan (born 722 CE, died 815 CE)**

The Arab world has many famous chemists in its history, but the person who is known as the founder of chemistry is probably Jabir ibn Hayyan. He is most well-known for the beginning of the production of sulphuric acid. He also built a set of scales which changed the way in which chemists weighed items in a laboratory: his scales could weigh items over 6,000 times smaller than a kilogram.

يمتلك العالم العربي الكثير من الكيميائين في تاريخه ولكن الشخص المعروف بأنه موجد الكيمياء على الأرجح هو جابر بن حيان. وأكثر ما يشتهر به هو الابتداء بانتاج حامض السلفوريك (الكبريتيك). وقام أيضاً ببناء مجموعة من الموازين التي غيرت طريقة وزن المواد لدى الكيميائين في المختبر: استطاع ميزانه أن يقيس مواد بـ 6000 مرة أصغر من الكيلوغرام.

### **Ali ibn Nafi' (Ziryab) (born 789 CE, died 857 CE)**

Ali ibn Nafi' is also known as 'Ziryab' (or 'Blackbird', because of his beautiful voice). He was a gifted pupil of a famous musician from Baghdad, and it was his talent for music that led him to Cordoba in the ninth century CE. He was the guest of the Umayyad ruler there. He is the person who established the first music school in the world in Cordoba, Al-Andalus, teaching musical harmony and composition. He revolutionized musical theory, and is also the person who introduced the oud to Europe.

علي بن نافع المشهور بزرياب وهو الطائر الأسود وذلك لجمال صوته. وكان طالب موهوب لموسيقي مشهور من بغداد وقد اتى موهبه إلى قرطبة في القرن التاسع الميلادي. وكان ضيف الحاكم الأموي هنالك. وكان أول شخص يؤسس مدرسة موسيقية في العالم في قرطبة في الأندلس لتعليم التاغم والتأليف الموسيقي. وعمل ثورة في عالم الموسيقى وهو الذي أدخل العود إلى أوروبا.

### **Fatima al-Fihri (born early 9th century, died 880 CE)**

Fatima al-Fihri was the daughter of a wealthy businessman. She used her father's inheritance to build a learning centre in Fez, Morocco. This learning centre became Morocco's top university, and it is where many students from all over the world come to study. Moreover, it was Fatima's sister, Mariam, who supervised the building of the Andalus Mosque, which was not far from the learning centre.

فاطمة الفهري كانت رجل أعمال ثري. واستخدمت ميراث والدها لبناء مركز تعليمي في مدينة فاس في المغرب. واصبح هذا المركز افضل جامعة في المغرب يقصدها الطلاب من جميع ارجاء العالم للدراسة. واكثر من ذلك اشرفت مريم اخت فاطمة على بناء مسجد الاندلس والذي لم يكن بعيد عن المركز التعليمي.

### **Al-Kindi (born around 801 CE, died 873 CE)**

Al-Kindi was a physician, philosopher, mathematician, chemist, musician and astronomer – a true polymath. He made ground-breaking discoveries in many of these fields, but it is probably his work in arithmetic and geometry that has made him most famous.

الكندي كان فيزيائي وفيلسوف وعالم رياضيات وكيميائي وموسيقي وعالم فلك كان شخص متثقف بحق. وقامت بأكتشافات هامة في كثير من المجالات ولكن على الأرجح اعماله في الهندسة وعلم الحساب ما جعله مشهوراً.

4/ SB, page 29 :

**Listen to and read the article again. Working in pairs, summarise the achievements of the four people in the text.**

.....  
.....  
.....  
.....  
.....

4/ SB, page 29 :

**Do you think that it was easier or more difficult in those days to reach such high levels of achievement in comparison with the present day? Give a reason for your opinion.**

.....  
.....

#### COMPREHENSION TEST

1. There were many achievements that Jabir ibn Hayyan made. Write down two of them. ....

.....  
.....

2. Al-Kindi made his fame by working in two main fields . Write them down.

.....

3. why was Ali bin nafi' called the "Black bird" ?

.....  
.....

4. Write down the sentence which indicates that Fatima's learning centre is very successful.

.....  
.....

5. Fatima built a learning centre in Fez. How did she manage to do that?

.....  
.....

6. What does the underlined word "**mathematician**" in the last paragraph, mean?

.....  
.....

7. Find a word in the text which means "**someone who has a lot of knowledge about many different subjects**"

.....  
.....

8. What do the underlined words ( pronouns) refer to?

.....  
.....

9. The writer states that Muslim scientists made many great achievements . Explain this statement , mentioning three fields that Muslim scientists influenced greatly in them.

.....  
.....

10. In ancient times, reaching such high levels of achievements in comparison with the present days is more difficult. Think of this statement, and in two sentences, write down your point of view.

.....  
.....  
.....  
.....

## City Masdar – A positive step?

\*Megaprojects are extremely large investment projects, which are designed to encourage economic growth and bring new benefits to cities. Although megaprojects vary in terms of size and cost, they are all, by definition, expensive, public projects that attract a high level of interest and media coverage. Projects range from motorways, airports, stations, tunnels, bridges, etc. to entire city complexes.

تعتبر المشاريع الضخمة مشاريع استثمارية مكلفة كثيرا وتصصم هذه المشاريع لتشجيع النمو الاقتصادي وجلب فوائد جديدة للمدن. وعلى الرغم من أن المشاريع الضخمة تتتنوع من حيث الكلفة والحجم إلا أنها جميعها مشاريع عامة مكلفة تجذب مستويات عالية من الاهتمام والتغطية الإعلامية. وتتراوح هذه المشاريع من الطرق العامة والمطارات والمحطات والأنفاق والجسور ..... الخ حتى بناء مدينة كاملة.

\*The concept of a megaproject is always based on the benefits it brings to a community. However, many megaprojects have been criticized because of their negative effects on a community or the environment. This essay will look at issues with regard to Masdar City, a megaproject in Abu Dhabi.

مفهوم المشاريع الضخمة يقوم دائما على أساس الربح المادي الذي يجلبه للمجتمع. ولكن تم انتقاد العديد من المشاريع بسبب الآثار السلبية على المجتمع او البيئة. سيناقش هذا المقال مواضيع بالأشارة الى مدينة مصدر مشروع ضخم في ابو ظبي.

\*Masdar City, which began its development in 2006 CE, will be the world's first carbon-neutral, zerowaste artificially-created city. Covering an area of six square kilometres, when it is completed in 2025 CE, it is expected to house more than 40,000 residents, 50,000 commuters, and 1,500 businesses involved in mainly environmentally-friendly products.

مدينة مصدر والتي بدء التطور فيها عام 2006 ستكون اول مدينة في العالم محاذية لاول اكسيد الكربون وصفر من الفضلات الصناعية . وعندما يتم الانتهاء من بنائها ستغطي مساحة ستة كيلو مربع. ويتوقع أن تنسع لأكثر من 40000 الف ساكن و 50000 زبون ومسافر 1500 شركة تنتج بشكل رئيسي منتجات صديقة للبيئة.

\*The city will run entirely on renewable energy sources. It is built on an advanced energy grid which monitors exactly how much electricity is being used by every outlet in the complex.

وستدار المدينة بشكل كامل من مصادر طاقة متعددة. وستبنى على شبكة طاقة متقدمة والتي تراقب كمية الأستهلاك المستخدمة بالتحديد من كل ابريز في المجمع.

\*Furthermore, in order to reduce its carbon footprint, Masdar City will be a car-free zone, designed to be pedestrian and cycle-friendly. Electric, driverless cars will operate as public transport vehicles, and the city will be connected to other locations by a network of roads and railways.

ولقليل من الأثر الكربوني مدينة مصدر س تكون منطقة خالية من السيارات مصممة للمشاة وركوب الدراجات الهوائية. وستكون السيارات الكهربائية بدون سائق وسائل النقل العامة وسترتبط المدينة بالواقع الأخرى عن طريق شبكة طرق وسكك حديدية.

\*Energy will be provided by solar power and wind farms, and there are also plans to build the world's largest hydrogen plant. A desalination plant will be used to provide the city's water, with 80% of water used being recycled. Biological waste will be used as an energy source too, and industrial waste will be recycled.

وستوفر الطاقة من خلال الطاقة الشمسية ومزارع الهواء (توليد الطاقة عبر مولدات) وهناك ايضاً مخططات لبناء أكبر مصنع هيدروجيني. مصنع تحلية مياه سوف يستخدم لتزويد المدينة بالمياه وتكرير 80% من المياه المستخدمة. وسيتم استخدام الفضلات الطبيعية كمصدر للطاقة ايضاً وسيتم ايضاً اعادة تدوير النفايات الصناعية.

The current residents of Masdar City are all students at the Masdar Institute of Science and Technology, a university whose students are fully committed to finding solutions to the world's energy problems

السكان الحاليون لمدينة مصدر هم طلاب في معهد مصدر للعلوم والتكنولوجيا وهي جامعة يلتزم طلابها بشكل كامل لأيجاد حلول لمشاكل العالم في الطاقة.

\*While the project has the support of many global, environmental and conservation Organisations, there is some criticism of it. It is felt that, instead of building an Artificial sustainable city, sustainability should be made a priority of existing cities.

وبما أن المشروع يحظى بدعم العديد من المنظمات العالمية والبيئية ومنظمات المحافظة إلا أنه يوجد بعض الانتقاد له. والشعور السائد بأنه بدلاً من بناء مدينة صناعية مستدامة يجب أن تكون الأولوية لدعم المدن الموجودة.

In conclusion, the benefits of Masdar City for the community and the environment greatly outweigh any disadvantages. If the aims of the developers are realised, Masdar City will be a blueprint for future urban planning that will inspire similar megaprojects in other countries.

بالمجملة فإن فوائد مدينة مصدر للمجتمع والبيئة تفوق بشكل كبير أية مساوى. وإذا تحققت اهداف المطورين فإن مدينة مصدر ستكون عنوان للتخطيط المدني في المستقبل وللذى سي لهم المشاريع العملاقة المشابهة في الدول الأخرى.

1/ SB, page 32 :

**What are the advantages and disadvantages of megaprojects to people and the environment?**

.....  
.....  
.....

3 / SB, page 33 :

**Read the essay on page again and answer the questions.**

1.What examples of megaprojects are provided in the essay?

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.....  
.....

2.What are the advantages of the creation of Masdar City? What are the disadvantages?

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.....  
.....

3. Do you think that Masdar City is a beneficial project or not? Give your reasons.

.....  
.....  
.....

### **COMPREHENSION TEST**

1. Megaprojects are designed for two certain purposes. Write down these two purposes.

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.....

2. Write down the sentence which indicates that not all Megaprojects are similar.

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.....  
.....

3. There are many types of megaprojects. Write down two of them.

.....  
.....  
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4. Because Masdar city will be a car-free city, the city has been designed to have different types of transportation. Write down two of them.

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.....  
.....

5. Masdar city has a unique quality that makes it the first city of its kind. Write down that quality.

.....  
.....  
.....

6. Who are the current residents of Masdar city?

.....  
.....  
.....

7. Find a word in the text which means “ **judged (something) with disapproval; evaluated or analysed**”.

.....  
.....  
.....

8. What do the underlined words ( pronouns) refer to?

.....  
.....  
.....

9. The writer thinks that mega projects should have many purposes in order to be attractive and popular. Explain this statement, suggesting three purposes of such projects.

.....  
.....  
.....

10. Masdar city is a beneficial project for the community and environment. Think of this statement, and in two sentences, write down your point of view.

### A founding father of farming

- A that** described how to treat different types of soil
- B which** is the study of plants
- C that** he and his followers put in place
- D when** the book was first written
- E who** was the King of Toledo

Ibn Bassal was a writer, a scientist and an engineer who lived in Al-Andalus in the eleventh century CE. He worked in the court of Al-Ma'mun, (1) who was the King of Toledo. His great passions were botany, (2) which is the study of plants and agriculture. Although he was a great scholar, he was also a practical man and all of his writing came from his own 'hands-on' experience of working the land.

ابن بصال كان كاتب وعالم ومهندس وعاش في الأندلس في القرن الحادي عشر ميلادي. عمل في بلاط المأمون وللذي كان ملك توليدو. شغفه الأكبر كان علم الزراعة وللذي يختص بدراسة النباتات والزراعة على الرغم من أنه كان عالم عظيم، كان أيضاً رجل عملي وكل كتابته كانت نتاج عمل بيده في الأرض.

One of the many things which Ibn Bassal achieved was *A Book of Agriculture*. The book consisted of sixteen chapters which explain how best to grow trees, fruit and vegetables, as well as herbs and sweet-smelling flowers; perhaps the most famous chapter of all was the one (3) that described how to treat different types of soil. Ibn Bassal also worked out how to irrigate the land by finding underground water and digging wells. He designed water pumps and irrigation systems. All of these things were passed on through his writing.

احد الاشياء الكثيرة التي حققها ابن بصال كانت كتاب الزراعة. واحتوى الكتاب على 16 فصل تشرح أفضل طريقة لزراعة الأشجار والفواكه والخضروات والأعشاب والورود ذات الرائحة الطيبة وربما يعبر الفصل الذي يصف كيفية التعامل مع الأنواع المختلفة من التربة هو الأشهر. ووجد ايضاً ابن بصال طريقة لري الأرض عن طريق حفر الآبار الأرتوازية وايجاد المياه الجوفية. وصمم مضخات مائية وأنظمة ري. وكل هذه الأشياء مررت عبر كتابته.

The influence of Ibn Bassal's book was enormous. As farmers down the generations followed his instructions and advice, the land became wonderfully fertile and produced more than enough food for the fast-growing population. The irrigation systems (4) that he and his followers put in place are still in evidence in Spain. Although his name is not widely known, Ibn Bassal's legacy to the world has been great.

كان تأثير كتاب ابن بصال كبير. لأن المزارعين عبر الأجيال أتبوا تعليماته ونصائحه وأصبحت الأرض خصبة بشكل رائع وأنتجت طعام كافٍ وأكثر لعدد السكان سريع النمو. أنظمة الري التي صنعتها هو وأتباعه ما تزال دليلاً في إسبانيا. وعلى الرغم من أن اسمه ليس مشهوراً كثيراً ولكن ميراثه للعالم كان عظيم

9/ WB, page 22 :

**Read the text again and answer the questions.**

1. Name two of Ibn Bassal's achievements.

.....

2. Find a verb in the second paragraph that means '**supply land with water**'.

.....

3. Guess the meaning of '**fertile land**' in the third paragraph. Which part of the text illustrates its meaning?

.....

4. Guess the meaning of '**legacy**' in the third paragraph. What does the author suggest is Ibn Bassal's legacy to the world?

.....

5. Which paragraph suggests that Ibn Bassal was a polymath? Give examples of his areas of knowledge.

.....

6. Why do you think the area around Toledo had a 'fast-growing population'?

.....

.....

**COMPREHENSION TEST**

1. Ibn Bassal was specialised in two fields . Write them down ?

.....

2. Where can Ibn Bassal's achievements be seen today?

.....

3. Ibn Bassal used many ways to irrigate the land. Write down two of them.

.....

4. Write down the sentence which indicates that Ibn Bassal was a polymath.

.....

5. Quote the sentence which shows the most important part of Ibn Bassal's book.

.....

6. What does the underlined phrase **hands on** mean?

.....

7. What do the underlined words ( pronouns) refer to?

.....

8. Ibn Bassal explained how to grow many types of trees and plants. Write down two of them.

.....

9. The writer states that when farmers followed Ibn Bassal's instructions and advice the land produced enough food for the fast-growing population. Explain this sentence, suggesting three ways in which farmers can increase the productivity of the land in Jordan.

.....

.....

.....

10. The area around Toledo had a fast-growing population . Think of this statement and, in two sentences, write down your point of view.

.....

.....

# UNIT FIVE

## THE ARTS

## The arts in Jordan

Jordan has a very rich cultural heritage thanks to the support of the Department of Culture and the Arts, which was founded in 1966 CE. Since then, the department has built up an exciting, ongoing programme of cultural activities related to all the arts: music, visual arts, performing arts and the written word.

يمتلك الأردن ميراث ثقافي غني ويعود الشكر لدعم دائرة الثقافة والفنون والتي أُسست عام 1966م. ومنذ ذلك الوقت فقد اوجدت الدائرة برنامجاً مثيراً ومستمراً للنشاطات الثقافية المتعلقة بجميع نشاطات الأدب مثل الموسيقى والفنون المرئية والتمثيل والكلمة الكتوبة.

In 1979 CE, the Royal Society of Fine Arts (RSFA) was established to promote visual arts in Jordan and other countries in the region. It has links with major art galleries around the world in order to encourage artists from different cultures to learn from each other.

في عام 1979 م أُسست الجمعية الملكية للفنون الجميلة لترقي بالفنون البصرية في الأردن والدول الأخرى في المنطقة. ولديها اتصالات مع المعارض الفنية الرئيسية من حول العالم لكي تشجع الفنانين من ثقافات مختلفة للتعلم من بعضهم.

The Jordan National Gallery of Fine Arts is one of the most important art museums in the Middle East. The collection includes over 2,000 works of art, including paintings, sculptures, photographs, installations, textiles and ceramics, by more than 800 artists from 59 countries. In 2013 CE, it held Jordan's largest art exhibition called '70 Years of Contemporary Jordanian Art.'

ويعتبر المعرض الوطني الأردني للفنون الجميلة من أهم المتاحف الفنية في الشرق الأوسط. وتتضمن مجموعته أكثر من 2000 قطعة فنية منها لوحات و تماثيل وصور وتركيبات وقمash وخرفانيات من انتاج أكثر من 800 فنان من 59 بلد. وفي عام 2013م استضاف اكبر معرض فني في الأردن وكان اسمه "سبعون عاماً من الفن الأردني المعاصر".

Until the 1990s, most Jordanian literature was only available in Arabic. However, thanks to PROTA (the Project of Translation from Arabic), many Jordanian plays, novels, short stories and poems are now translated into English, and people all over the world are able to read and appreciate them.

حتى فترة التسعينيات معظم الأدب الأردني كان يتوفّر فقط باللغة العربية. ولكن الشكر لبروتا (مشروع الترجمة من العربية) الكثير من المسرحيات والروايات والقصص القصيرة والقصائد الأردنية ترجمت إلى اللغة الإنجليزية وأصبح بأمكان الناس من حول العالم قرائتها والأشادة بها.

Every year, the United Nations Educational, Scientific and Cultural Organization (UNESCO) chooses a different Arab city as the Arab Cultural Capital. In 2002 CE, the city of Amman was awarded this title.

وفي كل عام تختار منظمة اليونسكو (منظمة الأمم المتحدة للعلوم والثقافة) مدينة عربية مختلفة كعاصمة للثقافة العربية. وفي عام 2012 م منحت عمان هذا اللقب.

Jordan has a centuries-old musical heritage. The National Music Conservatory (NMC) opened in 1986 CE, making it possible for more Jordanian students to study music seriously.

ويملك الأردن ميراث موسيقي لقرون عدة. وافتتح المعهد الموسيقي الأردني عام 1986م وتمكن العديد من الطلبة الأردنيين من دراسة الموسيقى بشكل جاد.

In 1987 CE, the National Centre for Culture and Arts was created, which show cases theatre and dance in Jordan and in the region.

في عام 1987 م انشأ المركز الوطني للثقافة والفنون والذي عرض المسرح والرقص الأردني والمناطق المجاورة.

Realising the value of art and culture, Jordan decided to offer Jordanians and the world an annual arts festival. In 1981 CE, the Jerash Festival for Culture and Arts was founded. This three-week-long summer programme is one of the largest cultural activities in the region. It takes place in the important archaeological site of Jerash, which underlines the close relationship between the arts and Jordan's cultural history.

وتقديراً لقيمة الفن والثقافة قرر الأردن تقديم المهرجانات السنوية للفن للأردنيين وللعالم. وفي عام 1981م أُوجِد مهرجان جرش للثقافة والفنون. وهذا البرنامج الصيفي الذي يمتد لثلاثة أسابيع هو أحد أضخم النشاطات الثقافية في المنطقة. ويقام في الموقع الأثري الذي يؤكد على العلاقة بين الفن وتاريخ الثقافة الأردنية.

4/ SB, page 35 :

**Listen to and read the report again and answer the questions.**

1. How does the Royal Society of Fine Arts show its support for the arts in Jordan?

.....

2. What makes The Jordan National Gallery of Fine Arts a major institution in the world of art?

.....

3. How has translation helped Jordanian literature?

.....

.....

4. What is the significance of the location of the annual Jerash Festival?

.....

.....

5. ‘To truly understand a country’s culture, you have to understand its artistic heritage.’ Do you agree or disagree? Justify your answer.

.....

.....

5/ SB, page 35 :

**Find an example of the following uses of articles in the report.**

1. *the* when the speaker and listener know what/who is being spoken about.

.....

2. *a/an* when it is not known what/who is being spoken about or it does not matter.

.....

3. *the* when we refer to a proper noun where there is only one of its type.

.....

4. zero article before uncountable and plural nouns, and when talking about something in general.

.....

5. zero article before the names of most countries, mountain ranges, languages, continents, towns, streets, days, months and years.

.....

#### **COMPREHENSION TEST**

1. Quote the sentence from the text which indicates that RSFA has connections with other galleries worldwide

.....

.....

2. The Jordan National Gallery of Fine Arts contains many collections of works of art. Write down two of them.

.....

.....

3. Write down three institutions mentioned in the report that interest in art and culture in Jordan.

.....

.....

4. What does the abbreviation ( PROTA) stand for?

.....

.....

5. There are many cultural activities related to the arts. Write down two of them.

.....  
.....  
.....  
**6. Write down the sentence which indicates that Jordanian literature was only in one language for a long time.**

.....  
.....  
.....

.....  
**7. what does the underlined word “textiles“ mean?**

.....  
.....

.....  
**7. types of cloth or woven fabric**

.....  
**8. What do the underlined words ( pronouns ) refer to ?**

.....  
.....

.....  
**9. The writer states that Jordan has a very rich heritage. Explain this statement , mentioning three benefits of arts.**

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.....  
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.....  
**10. To truly understand a country’s culture, you have to understand its artistic heritage. Think of this statement and , in two sentences , write down your point of view.**

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.....

## **Look at the photograph. Which craft is being practiced? Read the magazine article and check your answer.**

### **Glass Blowing**

Adnan, a professional craftsman, is at work in his studio. With the oven at 1,400 degrees Centigrade, 20 hours a day, a glass-making studio isn't the most comfortable place to be. For Adnan, however, this is more than just a job. My family has been blowing glass for around 700 years,' he says. My father learnt the craft from his father, and he taught it to me when I was a child'.

عدنان هو حرفبي محترف يعمل الأن في مشغله. وتبغ درجة حرارة الفرن 1400 مئوي والعمل لمدة 20 ساعة ولهذا معمل نفح الزجاج ليس اكثراً الأماكن راحة لتواجد فيه. بالنسبة لعدنان هذا ليس مجرد عمل. يقول عائلتي تفخ الزجاج منذ أكثر من 700 عام. وتعلم والدي الصنعة من والده وعلمتها لي عندما كنت طفل.

Adnan is passionate about this ancient craft, and regularly gives demonstrations and workshops to teach young people the skills of glassblowing.

وعدنان شغوف بهذه الحرفة القديمة وبشكل منتظم يقدم تعليمات وورش عمل لتعليم الشباب مهارات نفح الزجاج.

He strongly believes that unless we interest more young people in learning the craft, nobody will know how to make hand-blown glass in the future. These days, young people don't always want to follow their parents' professions, and, added to that, glassblowing isn't an easy job. It has to be an obsession, as it is for me'!

ويؤمن وبشدة انه ما لم نزيد اهتمام الشباب بتعلم هذه الحرفة لن يعرف احد كيفية صناعة الزجاج بالنفح في المستقبل. هذه الأيام الشباب لا يريدون أن يتبعوا مهنة والدهم ويضيف إلى ذلك أن نفح الزجاج ليس بالعمل السهل. يجب أن يكون هوس كما هوس بالنسبة لي.

Adnan still uses the technique that was first developed by the Phoenicians some 2,000 years ago. First, he pushes a thin metal blowpipe into the boiling hot furnace. Secondly, he lifts out the liquid sand and lays it on a metal plate. After that, he blows the red-hot glass until it becomes more flexible. Then he pulls and bends the glass into shape. He has to work extremely quickly because the liquid sand is already solidifying into glass.

وما زال عدنان يستخدم الطريقة التي استخدمت من قبل الفينيقيين منذ ما يقارب 2000 عام. او لا: يدخل أنبوب نفح معدني رفيع في الفرن الذي يغلق. ثانيا: يرفع الرمل السائل ويضعه على صحن معدني. بعد ذلك ينفح الزجاج الساخن المحمى حتى يصبح أكثر لونة. ثم يسحب ويثنى الزجاج إلى الشكل الذي يريد. وعليه أن يعمل بسرعة كبيرة لأن الرمل السائل يتصلب بسرعة لزجاج.

Adnan is making a delicate swan. Through the semi-opaque glass, you can see fine lines of turquoise, green and blue.

ويقوم الأن عدنان بصنع بجعة رقيقة. وعبر الزجاج شبه المغشى تستطيع رؤية خيوط من اللون الأحضر المزرق والخيوط الزرقاء والخضراء.

The sand gives us transparent, or white, glass, Adnan explains. We get this beautiful dark, cobalt blue by adding the metal cobalt to the melted glass. Then, this blue becomes a lighter, sea-green turquoise after adding copper. Finally, we decorate the glass by hand.‘

ويشرح عدنان أن الزجاج يعطينا اللون البيض أو الشفاف. ونحصل على اللون الزرق الغامق عن طريق إضافة معدن الكوبالت إلى الزجاج المذاب. ثم يصبح هذا اللون الأزرق لون تر��وازي (ازرق مخضر فاتح) بعد إضافة النحاس. أخبرنا نزین الزجاج يدويا.

These days we recycle broken glass. We also use commercially produced colours instead of using natural ingredients as in the past. Apart from that, nothing else about this craft has changed through the centuries. You can't use a machine to do this work,‘ he says The old ways are still the best.‘

في هذه الأيام نعيد تصنيع الزجاج المكسور. ونستخدم أيضاً الألوان التجارية بدلاً من المكونات الطبيعية كما في الماضي. بعيداً عن ذلك لم يتغير شيء في هذه الحرفة عبر القرون. ويقول لا يمكن استخدام الآلة ل القيام بهذا العمل. ويقول العمل على الطريقة القديمة ما زال الأفضل.

**2/ SB, page 38 :**

**Read the article again and choose the correct answers.**

1. A glass-making studio isn't comfortable because

**A. it hasn't changed much in hundreds of years. B. it's incredibly hot.**

**C. everything is done by hand. D. it is very small.**

2. Adnan runs workshops and gives demonstrations because

**A. he wants young people to learn the craft. B. glassblowing isn't an easy job.**

**C. it is an ancient craft. D. he has to work quickly.**

3. A glassblower has to work very fast because

**A. the furnace is extremely hot. B. machines are not used to do the work.**

**C. hot, liquid glass becomes hard very quickly. D. he is making a glass swan.**

1. .... 2. .... 3. ....

**3/ SB, page 38 :**

**Work in pairs. Try to work out the meanings of the highlighted words in the article. Then check in a dictionary.**

1. furnace : .....

2. solidifying : .....

3. semi-opaque : .....

4. turquoise : .....

5. cobalt : .....

6. transparent : .....

7. fine : .....

**1/ SB, page 35 :**

**1. What traditional handicrafts is Jordan well known for?**

.....

**2. Do you think that it is important for a country to keep producing traditional handicrafts? Why/Why not?**

.....

.....

.....

**COMPREHENSION TEST**

**1. Quote the sentence which indicates that the glass-making studio is incredibly hot.**

.....

**2. There are four steps to make glass. Write down two of them.**

.....

**3. Write down the sentence which indicates that technology can't be used in glass making.**

.....

**4. There are two things which have been changed in Adnan's craft through centuries. Write them down.**

.....

**5. Whose way of work does Adnan follow in his work?**

.....

**6. How did Adnan learn glassblowing ?**

.....

**7. Find a word in the text which means “**an act of explaining and showing how to do something, or how something works**”**

.....

**8. What do the underlined words ( pronouns ) refer to ?**

.....

**9. the writer states that individuals and governments must work together to preserve ancient crafts. Explain this statement. Suggesting three ways to preserve traditional crafts.**

.....

.....

.....

**10. Traditional crafts are in disappearing. Think of statement and , in two sentences , write down your point of view.**

.....

.....

.....

## A blog post

*Hi! My name is Rashed. I'm staying in London for a week, with my family. I hope you enjoy reading my blog.*

Wednesday

Yesterday was brilliant. We decided to go to the Victoria and Albert Museum (also known as the V&A), which is a big museum of art and design in central London. It has one of the largest collections of Islamic art in the world and, as you can imagine, we were keen to have a look.

We spent most of our time in the Jameel Gallery, which opened in 2006 CE. There were about 10,000 items on display (no, I didn't count them; the guide told us!). There were carpets and other textiles as well as pottery, ceramics, paintings and things made of ivory (from elephants), wood, metal and glass. My favourite thing was a beautiful Egyptian jug, which looked as if it was made out of glass. In fact it is rock crystal, and *it* was made over ten thousand years ago. The person who made it must have been incredibly skilled.

We were at the V&A all day (there's a good café there, and an excellent shop too!). Then, although we were quite tired, in the evening we went to a concert at the Royal Albert Hall. The orchestra was from Germany and it was brilliant! We had comfortable seats, but a lot of people stood right in front of the orchestra. They didn't sit down at all! I've never stood all the way through a concert, and I don't think I'd like to!

10/ WB, page 26 :

**Read the blog post quickly, and answer the questions.**

1. Where was Rashed when he wrote the blog?

.....

2. What did he most enjoy looking at?

.....

3. Where did he go in the evening?

.....

4. What bothered him?

.....

11/ WB, page 26 :

**Read the blog post again and answer the questions.**

1. Why did Rashed and his family decide to go to the V&A Museum?

.....

2. Name four materials that Rashed mentions.

.....

3 Look at the words and phrases in bold. Is Rashed using British or American English? Justify your answer.

.....

4. Look at the sentences in brackets in lines 5–6. In your opinion, what question is Rashed

answering and why?

.....  
.....  
**5. Would you stand up all the way through a concert? Why/Why not?**

.....  
**COMPREHENSION TEST**

**1. There is a situation that bothered Rashed during the concert. Write it down.**

.....  
**2. There are about 10000 items in display in the Jameel Gallery. Write two of them.**

.....  
**3. What material was the Egyptian jug made of?**

.....  
**4. What is the American equivalent for the word favourite ?**

.....  
**5. Write down the sentence which indicates the time in which Jameel gallery was opened.**

.....  
**6. There are some qualities that make the V&A museum popular . Write down two of them.**

.....  
**7. Find a word in the text which means “the art of producing something made from clay or porcelain, or the clay or porcelain items themselves “**

.....  
**8. What do the underlined words ( pronouns ) refer to?**

.....  
**9. You can do many activities during your holiday in a foreign country to make it an exciting journey. Explain this statement. Suggesting three benefits of visiting a foreign country .**

.....  
.....  
.....  
**10. Travelling to other country with your family is an exciting experience. Think of this statement. And in two sentences, write down your point of view.**