



ZERTIFIKATSPRÜFUNG  
ENGLISCH FÜR KAUFMÄNNISCHE UND VERWALTENDE BERUFE

Hier: **IT-Berufe (kaufmännisch)**

STUFE II (B1)

Schuljahr 2015/2016

Zugelassene Hilfsmittel: zweisprachiges allgemeinsprachliches Wörterbuch  
nur für die schriftliche Prüfung

Datum: 9. Mai 2016

Name, Vorname: .....

Geburtsdatum, Geburtsort: ..... in: .....

Letzter Schulabschluss: .....

Ausbildungsberuf: ..... Klasse: .....

Klassenleitung: .....

Engischlehrkraft: .....

**Ergebnisse:**

		Höchst- punktzahl	erreichte Punk- te
<b>Schriftliche Prüfung:</b>			
Teil 1 (Reception):			
Aufgabe 1:		20	
Aufgabe 2:		20	
gesamt:		40	
Teil 2 (Production):			
Aufgabe 3:		30	
Teil 3 (Mediation):			
Aufgabe 4:		30	

gesamt:

100

=

%

Mündliche Prüfung:

Teil 4 (Interaction):

30

=

%

Bestanden: ☐ ja ☐ nein

1. Korrektor(in): ..... 2. Korrektor(in): .....

IT-Berufe (kaufmännisch) – Stufe II (B1)

Schuljahr 2015/16

2

Name: .....

**Aufgabe 1: Hörverstehen (Reception)**

**20 Punkte**

You listen to a radio interview about Quantum computers.

Take notes **in English**. You will hear the interview twice.

Quantum computers			
1.	The special feature of quantum bits:	can have the values 1,0 or some state in between at the same time	2
2.	Particles that can be a quantum bit:	<ul style="list-style-type: none"> <li>photon</li> <li>elektron</li> <li>nucleus</li> </ul>	3
3.	The quantum computer is faster because:	it tests a lot of possibilities simultaneously	1
4.	The individual particles need to be controlled because:	<ul style="list-style-type: none"> <li>partivles interact with each other in an unpredictable way</li> <li>can lose their information when interacting with the trap</li> </ul>	4
5.	Most important ability of quantum computers:	to factorize a large number into two prime numbers	2

5.	Most important ability of quantum computers:	..... .....	2
6.	Uses for the quantum computer and their resulting applications:	<ul style="list-style-type: none"> <li>• encryption/decryption</li> <li>• developing new drugs</li> <li>• understand (a bit better) how molecules work</li> </ul>	3
7.	Two disadvantages of current commercial quantum computers:	<ul style="list-style-type: none"> <li>• very expensive</li> <li>• limited computing power</li> </ul>	2
8.	Size of the first quantum computers:	will fill a room/ room-sized	1
9.	Future use of quantum technology in commercial computers:	hybrid laptop with one quantum and one classical chip .....	2

Name: \_\_\_\_\_

**Aufgabe 2: Leseverstehen (Reception)****20 Punkte**

Ihr Vorgesetzter beauftragt Sie, sich anhand des folgenden Artikels über die neue Technologie des **4K UHD** zu informieren, um Kunden darüber informieren zu können.

Notieren Sie die Informationen aus dem Artikel auf der folgenden Seite **auf Deutsch**.

4K UHD			
1.	Neuerungen durch 4K UHD:	<ul style="list-style-type: none"> <li>• mehr Linien</li> <li>• mehr Pixel</li> <li>• Potential für detaillierteres Bild</li> </ul>	3
2.	UHD beinhaltet eine Erhöhung der Pixelzahl um ...:	2 → 8 Millionen Pixel	1
3.	Nachteile eines 4K-Bildschirms ergeben sich, wenn ...:	<ul style="list-style-type: none"> <li>• das quellbild hat niedrige qualität → renderd das bild hoch, somit auch fehler distanz zu hoch</li> <li>• kein Unterschied mehr erkennbar</li> </ul>	4

		<ul style="list-style-type: none"> <li>• .....</li> <li>→ .....</li> </ul>	4
4.	Anfangsschwierigkeiten:	<ul style="list-style-type: none"> <li>• Bildinhalte müssen 4k fähig sein, sonst nutzlos</li> <li>• .....</li> </ul>	2
5.	Vorteile eines OLED-Bildschirms:	<ul style="list-style-type: none"> <li>• .....</li> <li>• .....</li> <li>• .....</li> <li>• .....</li> </ul>	4
6.	Nachteile eines 4K OLED-Bildschirms:	<ul style="list-style-type: none"> <li>• .....</li> <li>• .....</li> </ul>	2
7.	Unterschiede zwischen verschiedenen Herstellern und der Grund dafür:	<ul style="list-style-type: none"> <li>• .....</li> <li>• .....</li> </ul> <p>Grund:</p> <p>.....</p>	3
8.	Allgemeine Vorhersage zur 4K-Technologie:		1

## **zu Aufgabe 2: Leseverstehen (Reception)**

### **What is 4K UHD? Ultra-High Definition explained, and why it matters for your next TV**

Just as we've got used to the "Full HD" term, along comes 4K Ultra HD as the next-generation step in the world of TVs. Offering more lines, more pixels, and ultimately the potential for more detail. But 4K is not a technology of the future, it's the here and now. There are 4K tablets, laptops, projectors and even smartphones. So is now the time to take the Ultra HD plunge?

#### **What is 4K UHD?**

Many current TVs are Full HD, which means they have a display made up of 1920 x 1080 pixels – around two million pixels if you're counting. That's probably what you have had in your living room right now.

That's fine enough for quality, but a 4K UHD TV has a 3840 x 2160 pixel resolution, delivering around eight million pixels in total. So the jump isn't twice the resolution of Full HD, it's four times.

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### **Should you care?**

However, just because a UHD TV has more pixels doesn't mean that everything will instantly look better. Typically a Full HD 1080p image or less needs to be upscaled to fill all those new pixels. That can work very well, but if the source image has a low resolution then it will highlight all its imperfections even more. Think about how normal DVDs are currently upscaled to your Full HD TV, for example, and how they look.

But let's not forget that resolution is perceived based on distance: sit too far away and you'll not see the immediate benefit of a 4K TV compared to a 1080p panel.

Fortunately, we all tend to sit with our faces just about as close as we can smoosh them to the screen these days, so within the optimal viewing distance, and with the right content on display, things will look ace.

### **The technical stuff**

As ever with new technologies there are potential teething issues.

With 4K there's a lot more data to churn through, and while many TV sets feature multiple HDMI inputs, typically only one will be the latest HDMI 2.0 format. That means you'll need 2.0 to support higher frame-rate (HFR) 4K content and wider colour gamuts and HDMI 2.0a, a newer format, to support higher dynamic range (HDR).

Thing is, aside from the latest Hobbit movies, almost all cinema is delivered at 24fps, so it's likely that gaming and broadcast are the two major future benefactors of HDMI 2.0.

### **So much choice**

Lastly there's choice, and boy is there now a lot of it, but increasingly the lean is towards OLED for a number of reasons. It's thin, it can be curved rather than flat, and it delivers a high dynamic range and broader range of colours than the current LCD/LED standard. The only issue is that it is hard to come by a 4K OLED set - most are 1080p at maximum - and they can be prohibitively expensive. Manufacturers also have their own technologies, smart operating systems (from Tizen to Firefox OS, Android Lollipop through to webOS) and, often, more baffling acronyms to try and win you over. It's all part of the game.

We can't make the choice for you, but be sure to see into the ultra-clear 4K UHD future before it's arrived in full swing. This time next year 4K will be the norm.