Busta n. 1

1. Il candidato illustri le caratteristiche e i punti di forza del sistema camerale.

2. Google Workspace: descrizione e funzionalità dei principali strumenti.

3. Il candidato descriva il funzionamento dei seguenti comandi:

   netsh interface ip show ipaddresses interface="Ethernet 5" level=verbose

   netsh interface ip set address name="Ethernet 5" source=static addr=192.168.1.1 mask=255.255.255.0

   netsh interface ip show ipaddresses interface="Ethernet 5" level=verbose

Is the internet killing our brains?

The web gives us access to endless information. What impact does this have on our memory, and our attention spans?

Throughout history, people have always worried about new technologies. The fear that the human brain cannot cope with the quantity of information made possible by the latest development was first voiced in response to the printing press, back in the sixteenth century. If you exchange "printing press" for "internet" , you will have the exact same concerns today, regularly voiced in the mainstream media, and usually focused on children.
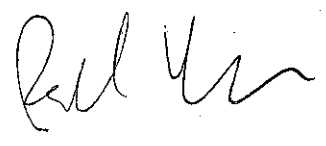
But is there any legitimacy to these claims? Or are they just needless worries ? There are several things to bear in mind when considering how our brains deal with the internet.

The human brain is always dealing with a constant stream of rich information - that's what the real world is

First, don't forget that "the internet" is a very vague term, given that it contains so many things across so many formats. You could, for instance, develop a gambling addiction via online casinos or poker sites. This is an example of someone's brain being negatively affected via the internet, but it would be difficult to argue that the internet is the main culprit, any more than a gambling addiction obtained via a real world casino can be blamed on "buildings"; it's just the context in which the problem occurred. However, the internet does give us a far more direct, constant and wide ranging access to information than pretty much anything else in human history. So how could, or does, this affect us and our brains?

Busta n. 2

1. I soggetti coinvolti nel trattamento dei dati personali, funzioni, compiti e responsabilità.

2. Il documento informatico e l'identità digitale.

3. Il candidato illustri il comando arp–a e descriva l'output riportato:

```
Prompt dei comandi - powershell                                    —    □    ×
PS C:\Users\MARIANIPA> arp -a

Interfaccia: 10.102.234.76 --- 0xc
  Indirizzo Internet      Indirizzo fisico      Tipo
  10.102.234.1            cc-3e-5f-a8-ff-30     dinamico
  10.102.234.41           84-2b-2b-88-1e-c0     dinamico
  10.102.234.47           9c-93-4e-93-7b-e8     dinamico
  10.102.234.73           84-2b-2b-87-d0-7e     dinamico
  10.102.234.80           00-80-91-74-05-aa     dinamico
  10.102.234.81           94-05-bb-10-99-06     dinamico
  10.102.234.83           00-21-b7-42-73-c6     dinamico
  10.102.234.102          00-e0-4d-71-06-42     dinamico
  10.102.234.113          38-22-e2-d0-a4-14     dinamico
  10.102.234.136          00-80-91-73-2f-c8     dinamico
  10.102.234.158          00-80-91-77-75-4f     dinamico
  10.102.234.160          d4-be-d9-eb-9c-cc     dinamico
  10.102.234.171          78-45-c4-29-88-b4     dinamico
  10.102.234.190          00-80-91-73-32-37     dinamico
  10.102.234.208          f4-8e-38-7c-9f-c0     dinamico
  10.102.234.226          6c-0b-84-94-74-f3     dinamico
  10.102.234.228          64-00-6a-0a-20-fc     dinamico
  10.102.234.255          ff-ff-ff-ff-ff-ff     statico
  224.0.0.22              01-00-5e-00-00-16     statico
  224.0.0.251             01-00-5e-00-00-fb     statico
  224.0.0.252             01-00-5e-00-00-fc     statico
  239.255.255.250         01-00-5e-7f-ff-fa     statico
  255.255.255.255         ff-ff-ff-ff-ff-ff     statico
PS C:\Users\MARIANIPA> _
```

Apple celebrates its 47th birthday

Apple, one of the largest computer and consumer electronics companies of the world is celebrating its 40th birthday. The company was founded on April 1st 1976 by Steve Jobs and Steve Wozniak. Today, their products are bought by millions around the world.

Steve Jobs was a visionary and the driving force behind Apple. He wanted to make computers lightweight and easy-to-use. The first computer, the Apple I , was sold for $666 . Only 200 of them were produced. In 1984 the company brought the Macintosh to users. The PowerBook hit the markets in 1991 and was the world's first real laptop computer. It was reinvented in 2006 in the form of the MacBook.

However Apple did not stay in the computer business. At the beginning of the new millennium the company started selling iPods, their revolutionary music players. At the same time iTunes, a new way of buying and storing music , was released.

Apple's success came with the way the company adapted to changing technology. The first smartphone was introduced in 2007. Today, the company generates two-thirds of its income selling iPhones. Three years later Apple hit the market with the first tablet computer, the iPad. Up to now over 250 million have been sold around the world.

Apple Watch is the latest in a series of technological inventions. However, the company is not at the end of producing innovative devices. Future plans call for new technology, for example, smart home gadgets and health care devices.

Busta n. 3

1. I servizi pubblici digitali. Principi fondanti. L'esempio del Registro Imprese.

2. Gli organi delle Camere di commercio e le loro funzioni.

3. Il candidato descriva la struttura dell'indirizzo IPV4. Dato il seguente indirizzo IP : 5.76.86.56, fornisca la formula di conversione in numero intero.
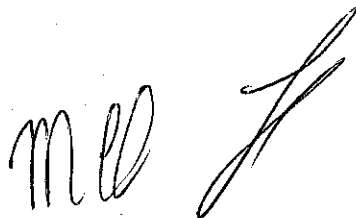
China With Another New Supercomputer

China has built the world's most powerful computer. The *Sunway TaihuLight* ,is able to make a huge number of calculations per second. That is more than twice as fast as the *Tianhe-2*, a Chinese supercomputer that previously held the world record. The new computer is located at the National Supercomputing Centre in Wuxi.

In the ranking of the world's 500 fastest computers, China has now overtaken the United States. 167 computers come from China compared to 165 in the United States. In 2006 there were only 30 Chinese computers on the world's top list, in 2000 China did not have a single computer in the fastest 500 ranking. Other countries currently ranking on the top ten list are from Switzerland, Germany and Saudi Arabia.

The new computer runs on its own operating system, based on Linux. Among other things the *Sunway TaihuLight* will be used for weather forecasting, manufacturing as well as collecting and analysing large amounts of data.

For the first time China has built a computer with all its components locally manufactured. Up to now most Chinese supercomputers relied on American chip technology. The *Sunway TaihuLight* uses Chinese-manufactured processors.
The newly built supercomputer shows that China is willing to take on the United States in computer technology. Currently, Intel produces 96% of all computer chips worldwide.

Busta n. 4

1. Le funzioni regolamentari delle Camere di commercio: la sicurezza dei prodotti e la metrologia legale.

2. Chi sono i soggetti tutelati nel contesto della normativa privacy? Chi sono gli interessati?

3. Il candidato illustri il comando NS Lookup e indichi come trovare il server DNS di risoluzione dei nomi.

Mobile Phones are Changing Peoples' Lives in Africa

Mobile phones have been changing the lives of Africans all over the continent more than any other invention before. There are more people using mobile phones in Africa than in Europe and America combined. In fact, mobile phones are growing fast on the whole continent, especially in regions south of the Sahara desert. Today there are 600 million mobile phone users in Africa. By the end of 2023 the number will be close to a billion.

Mobile phones provide a wide variety of services that citizens, especially in rural areas wouldn't have. They offer education in places where it is hard to get. Mobile phones are used for farming projects, where farmers can get information on crop prices. Health websites tell villagers what to do in case of emergencies when no doctor is available or faraway. People even use mobile phones for entertainment in areas where there is no TV. Mobile banking has become widespread across Africa because many Africans don't have their own bank account. Over 60 million use mobiles to transfer and receive money quickly and at a low cost. Mobile phones are helping people set up businesses and make money, thus raising the continent's overall income. Through mobile phones more people in Africa have access to the internet than to clean water or sanitation.

last ten years the number of mobile phone users in Africa has increased greatly. While in the early days people focused on sending messages and talking to relatives, the internet is the main service that is used today. It has become an absolute necessity and in many places has replaced the desktop PC. In Nigeria, for example, there are more mobile phone users than PC-Internet users. Especially Kenya is strongly connected to mobile phones. The country is also called *Silicon Savanna* because 92 % of all Kenyans go online through mobiles.

Busta n. 5

1. Cos'è l'AgID? Quali sono le funzioni e i compiti?

2. Principi di funzionamento della virtualizzazione. Nozioni sul Desktop Virtuale.

3. Il candidato illustri come svuotare la cache DNS e in quale contesto si può rendere necessario il comando descritto.

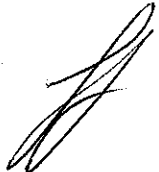# Microsoft No Longer Supports XP Operating System

Microsoft has announced that support for its successful XP operating system is coming to an end. The operating system is 12 years old and still used by a third of all Windows users. Users, however, must not worry as computers will continue to operate. But there will no longer be any updates or security patches delivered by Microsoft.

Security experts around the world state that computer users should update their computers to a more modern operating system, preferably Windows 7 or 8, because these are supported by Microsoft. They also say that it will become easier for hackers to enter systems that no longer are able to defend themselves from new attacks.

Windows XP was developed towards the end of the1990s and introduced in 2001. It did not have the requirements to deal with the Internet, cloud computing or mobile devices.

Some offices and companies have stuck to XP over the years because it runs on older computers. Many firms do not have the funds to buy new hardware. When Windows 7 was launched in 2009, users still did not want to move away from XP, even though today, more than half of all Windows users run Windows 7. In addition,
some special applications were specially written for Microsoft XP and will not run on other systems.

sees the end of Windows XP with mixed feelings. For one, they hope it
will spur more users to skip Windows 7 and go directly to Windows 8, which has
been rejected by many in the computer world. On the other side, they fear that users
might altogether leave Windows and switch to other operating system like Linux or
Apple OS.

Busta n. 6

1. Come installare Sistemi Operativi in modalità Unattended.

2. Il domicilio digitale.

3. Il candidato ipotizzi di aver lanciato il comando ROUTE PRINT da linea di comando. Descriva il comando ed analizzi le seguenti informazioni:

```
===============================================================================
Elenco interfacce
   5...00 ff 0c 60 2c 96 ......Sophos TAP Adapter
  12...94 9a a9 23 ba c6 ......Surface Ethernet Adapter #2
   8...b6 ae 2b c6 17 83 ......Microsoft Wi-Fi Direct Virtual Adapter
   6...b6 ae 2b c6 12 83 ......Microsoft Wi-Fi Direct Virtual Adapter #2
  10...b4 ae 2b c6 16 82 ......Marvell AVASTAR Wireless-AC Network Controller
   1...........................Software Loopback Interface 1
===============================================================================

IPv4 Tabella route
===============================================================================
Route attive:
     Indirizzo rete          Mask          Gateway      Interfaccia Metrica
          0.0.0.0          0.0.0.0    10.102.234.1    10.102.234.76     25
     10.102.234.0    255.255.255.0         On-link    10.102.234.76    281
    10.102.234.76  255.255.255.255         On-link    10.102.234.76    281
   10.102.234.255  255.255.255.255         On-link    10.102.234.76    281
        127.0.0.0        255.0.0.0         On-link        127.0.0.1    331
        127.0.0.1  255.255.255.255         On-link        127.0.0.1    331
  127.255.255.255  255.255.255.255         On-link        127.0.0.1    331
        224.0.0.0        240.0.0.0         On-link        127.0.0.1    331
        224.0.0.0        240.0.0.0         On-link    10.102.234.76    281
  255.255.255.255  255.255.255.255         On-link        127.0.0.1    331
  255.255.255.255  255.255.255.255         On-link    10.102.234.76    281
===============================================================================
```

Ransomware - A New Computer Threat

Ransomware is the newest threat to computer users. It is a software virus
that blocks your computer system until you pay money. The viruses
have scary names, like *Cryptolocker* or *Cryptowall* . The first ransomware
viruses appeared in 2013 but they have become more dangerous recently.

The viruses can sweep across the internet in a short period of time and infect millions
of computers overnight.
Ransomware viruses spread via links, unauthorized downloads as well as
email attachments. They hit your computer without you knowing it. In many cases
the virus stops your hard drive from working or encrypts documents and
photos, which then become useless.

Hackers demand money, ranging from a few to a thousand dollars, for letting
you control your computer again. Not only PCs are reported to be affected by
ransomware, tablets and mobile phones have also caught the virus.

Virus developers are always looking for new ways to make money. Last year
ransomware attacks went up by 100%. Currently, there are about 30,000
infections around the world every day.

Although anti-virus firms are working hard to produce patches to protect
such attacks, they are not always fast enough to provide security from every virus.

However, there are some things you can do to protect yourself. Do not
download **suspicious** files from the internet and be careful when you open email
attachments. Finally , allow your operating system to update regularly and make sure
your anti-virus databases are also up-to-date.

Busta n. 7

1. Il supporto della Camera di commercio alle imprese per l'approdo ai mercati esteri.

2. Cosa è un dato personale? Cosa non è un dato personale? Cosa è un dato particolare?

3. Il candidato illustri come accedere al registro eventi della macchina e indichi come estrarre un evento dal registro eventi sicurezza.
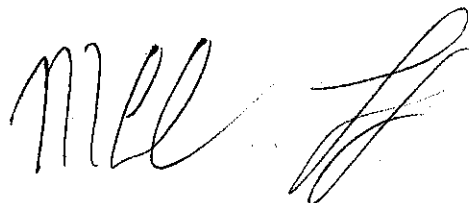
Facebook Introduces Chatbots to Messenger

In 2016, Facebook founder Mark Zuckerberg announced that so-called chatbots would soon appear in the company's Messenger app.

Chatbots are small software programs based on artificial intelligence and can communicate with people. They have changed the way we receive information. A chatbot, for example, can talk to a customer, order items or listen to complaints. It can answer questions, solve complicated problems or make appointments. It's like talking to a robot. As time goes on chatbots will be able to learn, based on the experience they have .

Facebook's Messenger is an extremely popular piece of communication software, used by 900 million people around the world. Thanks to chatbots, users have been able to develop their own chatbots and use them in Messenger. People can then send a message to a bot which will know what to do depending on the situation.

While internet experts say that chatbots can be a big advantage, there are those who see risks. There is no way we can monitor every action that chatbots carry out. Others think that such bots may encourage you to do things that you really wouldn't want to do, like open a new website or install new apps.

Busta n. 8

1. I diritti dell'interessato e la loro gestione nell'ambito della normativa in materia di protezione dei dati personali.

2. L'interoperabilità nazionale ed europea. La piattaforma digitale nazionale dei dati.

3. Il candidato illustri il comando set e le principali informazioni che possono essere estratte dall'analisi dei risultati dell'esecuzione del comando.

BUSTA NON ESTRATTA

North Korea's Secret Computer System - Red Star OS

German computer experts have been taking a closer look at North Korea's
own secret computer operating system, Red Star OS. Until now, not much has been
known about it.

The Communist country runs its own operating system - an altered version of Linux.
It looks and feels like a normal operating system with all the apps and software .
But Red Star OS is controlled by the state . A closer look shows that it
uses technology that allows authorities to spy on its citizens.

The system detects if a user wants to change thing, then automatically shuts
down and reboots. It also has special security features that prevent users from other
countries from hacking into it. Messages are encrypted to guarantee safe
transport. Files are watermarked so that the government can see if and how users
have changed them. Such security also allows authorities to find out who
downloads pirated music and movies from the west.

North Korea has been working on its own operating system for years, in
an effort to replace the ageing Windows XP , which many people still have installed.
But nobody really knows how many North Koreans are using Red Star OS.

The communist country controls its citizens like no other state in the world. North
Korea is isolated technologically from the rest of the world. There are no internet
connections to the outside . Social media and other websites cannot be accessed from
within.

BUSTA NON ESTRATTA