All. N. 1 al quarto verbale

Busta Calcolo 1

1. Si illustrino le principali finalità del monitoraggio di rete e di sistema, citando eventuali strumenti o architetture utilizzabili.

2. A cosa serve la memoria RAM e in cosa si distingue dall'hard disk o SSD?

3. Linux provides a huge range of prominent factors that may interest any user's eye. To understand any operating system importance, it is important for us to check on certain aspects and factors that we found essential for any operating system to have in them for a better user experience and reliable operating

All. n. 2 al quarto verbale

Busta Calcolo 2

1. Cosa sono le VLAN e quali vantaggi offrono in una rete interna ?

2. Cos'è un virus informatico e come può infettare un PC?

3. Linux is an operating system that uses the fullest of the hardware and provides a user focused services efficiently and takes care of multiple other options by itself but also provides the user to take full control over it for any manual changes, this takes the operating system, as it provides fully user focused customization of our linux operating system and this improves our overall usability.

All. n. 3 al Busta verbale

Busta Calcolo 3

1. Il candidato illustri i vantaggi operativi e architetturali dell'uso di macchine virtuali o container, indicando anche possibili criticità e requisiti infrastrutturali (CPU, memoria, rete, storage).

2. Cos'è un sistema operativo e quale funzione svolge tra utente e hardware?

3. Software in embedded systems is becoming more important because it has a lot of development potential. In embedded systems, software basically consists of operating systems, middleware and application. Among these, OS is extremely important because it manages and controls all the hardware in any embedded system and also keeps the applications running without any issues

ALL N. 4 AL QUARTO VERBALE

Busta Calcolo 4

1. Il candidato descriva il principio di funzionamento di strumenti di gestione automatizzata come Puppet, Ansible o Foreman, spiegando in che modo possono semplificare la configurazione di rete, server e storage in un'infrastruttura distribuita.

2. Che differenza c'è tra un file compresso (zip, rar) e un file normale?

3. it is important to have a good performance and task handling system, without any other service running in the background and disturbing your system efficiency by dividing your hardware processing with any other background processing. Linux makes sure that only some specific task can be handled by the system, which may be prioritized as user focused tasks. This can be considered important and completed faster and quicker and taken into consideration and performed more efficiently.

All. N. 5 al quarto verbale

Busta Elettronica 1

1. Mi parli dell'oscilloscopio: descriva il principio di funzionamento, le principali caratteristiche tecniche e i limiti di impiego. In particolare, spieghi il significato di banda passante in ingresso, di memoria di acquisizione e di frequenza di campionamento, e come questi parametri influenzano la qualità della misura.

2. Cosa indica l'estensione di un file (es. .docx, .pdf, .jpg)?

3. Everyone interested in analog electronics should find some value in this book, and an effort has been made to make the material understandable to the relative novice while not too boring for the practicing engineer. Special effort has been taken to ensure that each chapter can stand alone for the reader with the proper background. Of course, this causes redundancy that some people might find boring, but it's worth the price to enable the satisfaction of a diversified audience

All. N. 6 al quarto verbale

Busta Elettronica 2

1. Mi descriva il funzionamento e le principali caratteristiche di un multimetro da banco. In particolare, spieghi le grandezze che può misurare, il principio di misura, il significato del numero di cifre o bit di risoluzione, la precisione dello strumento e i principali limiti di impiego.

2. Perché è importante fare copie dei propri dati?

3. The name Ideal Op Amp is applied to this and similar analysis because the salient parameters of the op amp are assumed to be perfect. There is no such thing as an ideal op amp, but present day op amps come so close to ideal that Ideal Op Amp analysis becomes close to actual analysis. Op amps depart from the ideal in two ways. First, dc parameters, such as input offset voltage, are large enough to cause departure from the ideal. The ideal assumes that input offset voltage is zero. Second, ac parameters, such as gain, are a function of frequency, so they go from large values at dc to small values at high frequencies.

All. 7 al quarto verbale

Busta Elettronica 3

1. Quali sono gli strumenti e gli accessori fondamentali per le operazioni di saldatura e di rework su circuiti stampati, e quali accorgimenti è importante adottare per lavorare in modo efficace e sicuro? Inoltre, supponga di dover realizzare un PCB su cui dovrà essere bondato un circuito integrato non incapsulato mediante tecniche di wedge bonding: quali considerazioni progettuali adotterebbe per assicurare un buon risultato del processo di bonding ?

2. Che differenza c'è tra un file compresso (zip, rar) e un file normale?

3. Electrical applications increasingly use a single supply voltage of 5 V or less as portable electrical equipment becomes more popular. The supply voltage for portable systems can be as low as the voltage provided by one battery cell (1.5 V). Reduced supply voltage designs must use the complete power supply span to have a usable dynamic range. Operational amplifiers that use the complete span between negative and positive supply voltage for signal conditioning
are generally known as rail-to-rail amplifiers. The usable span is an important value because it influences several parameters such as noise susceptibility, signal-to-noise ratio (SNR), and dynamic range. Signal sources are often connected to the positive or negative supply rail. Operational amplifiers need rail-to-rail input capability to match both signal sources with one
device.

All. 8 al Quarto verbale

Busta Elettronica 4

1. Strumenti e tecniche per la diagnosi e la verifica di cavi elettrici e multipolari.
    a) Un cavo coassiale lungo 100 metri è interrotto al suo interno. Quali tecniche può utilizzare per individuare la posizione del guasto?
    b) Deve misurare in modo veloce e preciso il tempo di propagazione dei segnali su decine o centinaia di cavi multicanale prima della loro installazione in un apparato sperimentale. Come potrebbe organizzare questa misura?
    c) Dopo aver montato connettori su numerosi cavi multipolari, come può verificare la correttezza del cablaggio, identificando eventuali cortocircuiti o interruzioni?"

2. Cos'è un sistema operativo e quale funzione svolge tra utente e hardware?

3. The general utility of the operational amplifier is derived from the fact that it is intended for use in a feedback loop whose feedback properties determine the feed-forward characteristics of the amplifier and loop combination. To suit it for this usage, the ideal operational amplifier would have infinite input impedance, zero output impedance, infinite gain and an open-loop 3 dB point at infinite frequency rolling off at 6 dB per octave. Unfortunately, the unit cost–in quantity–would also be infinite. Intensive development of the operational amplifier, particularly in integrated form, has yielded circuits which are quite good engineering approximations of the ideal for finite cost.

All. 9 al quarto verbale

Busta Meccanica 1

1. Si discutano i principali strumenti di misura utilizzati per il controllo dimensionale di componenti meccanici.

2. Cosa significa "installare un aggiornamento" e cosa può succedere se non si aggiorna mai il PC?

3. Toward the right side of the status bar, you'll see a tool icon with three horizontal lines. This tool opens a menu that controls the display of the status bar. You use this menu to turn the items in the status bar on or off. A check mark by an item indicates that it's currently on. If for some reason you don't see all of the buttons mentioned in the following exercise, check this menu to make sure all the status bar options are turned on. For the items in the left half of the status bar, choose Status Toggles from the menu

All. N. 10 al quarto verbale

Busta Meccanica 2

1. Si discutano le principali proprietà tecnologiche dei materiali

2. Che cos'è un driver e perché serve per usare stampanti, schede video o periferiche USB

3. In word processors, the term block refers to a group of words or sentences selected for moving, saving, or deleting. You can copy a block of text elsewhere within the same file, to other files, or to a separate location on a server or USB storage device for future use. AutoCAD uses blocks in a similar fashion. In a file, you can turn parts of your drawing into blocks that can be saved and recalled at any time. You can also use entire existing files as blocks. You'll start by opening the fi le you worked on in the previous chapter and selecting the objects that will become a block.

ALL N. 11 AL QUARTO VERBALE

Busta Meccanica 3

1. Si discutano i principali trattamenti termici applicati ai metalli

2. Cosa significa "avvio del computer"? Può descrivere a grandi linee cosa succede ?

3. You've seen that, with little effort, you can create a symbol and place it anywhere in a file. Suppose you want to use this symbol in other files. When you create a block by using the Block command, the block exists in the current file only until you specifically instruct AutoCAD to save it as a separate drawing file. When you have an existing drawing that has been brought in and modified, such as the door, the drawing file associated with that door isn't automatically updated. To update the Door file, you must take an extra step and use the Export option on the Application menu.

All. N. 12 al quarto verbale

Busta Meccanica 4

1. Il candidato illustri come vengono definite e rappresentate le tolleranze dimensionali

2. Qual è la differenza tra file e cartella?

3. Blocks are extremely useful tools, but for some situations, they're too restrictive. At times, you'll want to group objects so that they're connected but can still be edited individually. For example, consider a space planner who has to place workstations on a floor plan. Although each workstation is basically the same, some slight variations in each station could make the use of blocks unwieldy. For instance, one workstation might need a different configuration to accommodate special equipment, and another workstation might need to be slightly larger than the standard size. You would need to create a block for one workstation and then, for each variation, explode the block, edit it, and create a new block

All. N. 13 al Quarto Verbale

Busta Meccanica 5

1. Si illustrino le caratteristiche salienti di un trattamento termochimico di un metallo.

2. Come si collega un computer a una rete locale o Wi-Fi ?

3. Imagine a fi ling system that has only one category into which you put all of your records. For only a handful of documents, such a fi ling system might work. However, as soon as you start to accumulate more documents, you would want to start separating them into meaningful categories, perhaps alphabetically or by their use, so that you could fi nd them more easily. The same is true for drawings. If you have a simple drawing with only a few objects, you can get by without using layers. But as soon as your drawing gets the least bit complicated, you'll want to start sorting your objects into layers to keep track of what's what. Layers don't restrict you when you're editing objects, such as blocks or groups, and you can set up layers so that you can easily identify which object belongs to which layer.