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Questions

1. What is information technology?

Information technology is the task of gathering data and processing it into information,in essence creating a form of electronic data that's accessible to anyone using computers,since Information technology comes off as the bridge the links people with technology,software, data, networks. The people who supply this Information are referred to as IT personnel,their job is to supply and support IT,and they consist of computer engineers, computer scientists who’s job is to build and design computer chips and write software for computers.

1. Describe information system analysis

Information system analysis is a process in which you collect and interpret facts further identifying problem then dismantling a system into its components, its main purpose is studying a system and its parts in order to identify its objectives,to conclude its a problem solving technique that improves systems and ensures all the components of the system work efficiently.

1. Describe the different structure of IS departments in business organizations
2. What are some of the different techniques for documenting data flows

Data flow modeling- used and most common,which indicates human activities that take place in the environment,but is not enough to build a computerized information system

Data flow diagrams-this is used to understand data movements, it contains the systems functionality from the technical to the physical constraints that exist in the current system

1. Identify different analysis tools to assist with documentation.

Microsoft Office Suite

Google docs

SWOT

1. Explain the different systems analysis techniques used in the industry

Brainstorming

Bechmarking

Mind maps

SWOT analysis

1. Discuss IT roles in a business organization and elaborate on them

System analyst-These are IT architectures who analyzes work flow,process,operation and structured

1. Distinguish between a Network Administrator’s role and a System Administrator.

Network administrator-A network administrator purchases and configures computers connected in a network, he/she’s responsibility is to maintain the network,trouble shoot and secure networks from intrusion/malware etc

System Administrator-A system administrator is responsible for administering computers in a organization to conclude installing new software, creating accounts, train users and troubleshoot the system

1. What are some of the information-gathering techniques used by information systems analysts in the industry?
2. Elaborate more on how IT has transformed how your industry works

IT has revolutionized the way everything works and I still working to make things easier for mankind and connecting the world,with the ability to make communication easier,countless questions have been answered and work has never been easier with the ability to virtualize almost anything,tasks can be done before hand and predicting errors and faults can be done easily thank you to IT

1. In which way can an organization leverage on the use of Information Technology
2. Give a short explanation how the components in a computer work and communicate with each other

It all starts with the system bus,which is a pathway composed of cables and connectors,its main purpose is to control signals moving between the major components of the computer system so to conclude the system bus provides communication between the CPU and other peripherals.Theres three main buses that function in a system

1. What essential quality does a System administrator need, to keep up with new Technology, trends and fixes

1. What are the constraints in the designing of instruction sets for computers?
2. Name the elements, which make up computer architecture and what are their functions.
3. Name and explain the different computer components you get in a computer

Motherboard-the circuit board that lets other components communicate with each other,contains slots for expansions to add additional hardware/upgrades

CPU-another word for the CPU is the brain of the computer,its responsible for performing all the calculations needed by a system sizes vary and the larger the CPU the more intense work load it can carry

Video card-a video card is responsible for projecting images on your screen,high end cards can be purchased if users want more vivid and fast processed images.

RAM-random access memory,this is tempory memory that runs in the backround,its volatile so its contents are lost once the computer is switched off.

1. What is the relevance of ethics in IT
2. What is IT Infrastructure

IT infrastructure refers to composite hardware,software,network resources and services required in the IT environment.it consist of all components that somehow play a role in IT. The environment consists of…

Hardware:Computers,switches,servers etc

Software:Enterprise resource planning

Network:internet,firewall etc

1. What are the types of storage? Discuss and distinguish between the types listed

SSD(solid state drive)-these have no moving parts and are faster than traditional drives allowing them to be more robust and are more economic

NAS(network attached storage)-these are hard drives connected in an array storage connected to a network router

FlashDrive-these are similar to solid states but are reduced in size and capacity yet are extremely portable

Cloud storage-storage online usually provided by a service provided,this allows to store files online and accessibility can be done from anywhere with internet access

1. What is a software? What categories of software do we have?

Software is a set of instructions or programs instructing a computer to do specific tasks, scripts, application,programs and a set of instructions are all often terms used to describe software

Categories of software-

Application software-used to perform tasks

System software- Operating systems(OS)

Programming software- Tools to write programs

1. What is the difference between computers today and those that existed in the 1950s

The computers of today have become a household brand thank you their reduction in size,computers back then were really large in size…one room could make up one computer

Computers nowadays are compact,versatile,more powerful and more efficient than ever as they come in different sizes and types all with different capabilities,they have more than they can offer as ever as they have can produce more than their initial size,with everything shrunk down yet able to produce more than their size I essence the difference between computers of today and those of the 1950’s is size,power,variations and the fact that what was packed into one room can now be stuffed into a small plastic design.

1. List and explain the function of computer architecture elements
2. What are the basic organization of a computer

CPU

1. Describe the design constraints in the design of instruction sets for computers
2. Describe the past, present and future computer configurations.
3. Explain the performance and environmental requirements of computer configurations over the past 10 years

27. Describe the following three categories of computer applications and their performance characteristics  Real-time, Home, Education