Name : Hamza Iqbal

ID : 14784

Subject : Introduction To ICT

Sir : Dr. Atif Ishtiaq

Date : 25/09/2020

Scanned with CamScanner

DAWN Imported
M T W T F S S
Date:

QNo2:-
What are the relation b/w hardware and software. And the types of software with Logical system architecture.

Ans:-
Hardware:
Hardware refers to the physical devices of a computer system.

Software:
Software refers to a collection of programs.

Relationship Between Hardware and software:-

1. hardware and software can be loaded with different software to make a computer system perform different types of job.

2. Both hardware and software are necessary for a computer to do useful Job. They are complementary to each other.

3. Except for upgrades hardware is normally a one-time expense, whereas software is a continuing expense.

سب سے بڑا سائز اعلیٰ ترین کوالٹی ڈان پیپرز خود بھی خریدیں اور دوستوں کو بھی بتائیں

Scanned with CamScanner

4. Upgrades refer to renewing or changing components like increase the main memory, or hard disk capacities, or adding speakers, modems etc.

Types of Software

Most software can be divided into two major categories.

* **System Software:**
System software are designed to control the operation and extend the processing capability of a computer system.

* **Application Software:**
Application software are designed to solve a secific problem or to do a secific task.

System Software:

* 1. Make the operation of a computer system more effective and efficient.

Scanned with CamScanner

2. Help hardware component work together and provide support for the development and execution of application software.

3. Program included in a system software package are called system program and programmers who prepare them is called system programmer.

4. Example of system software are operating systems, programming language translators, utility programs and communications software.

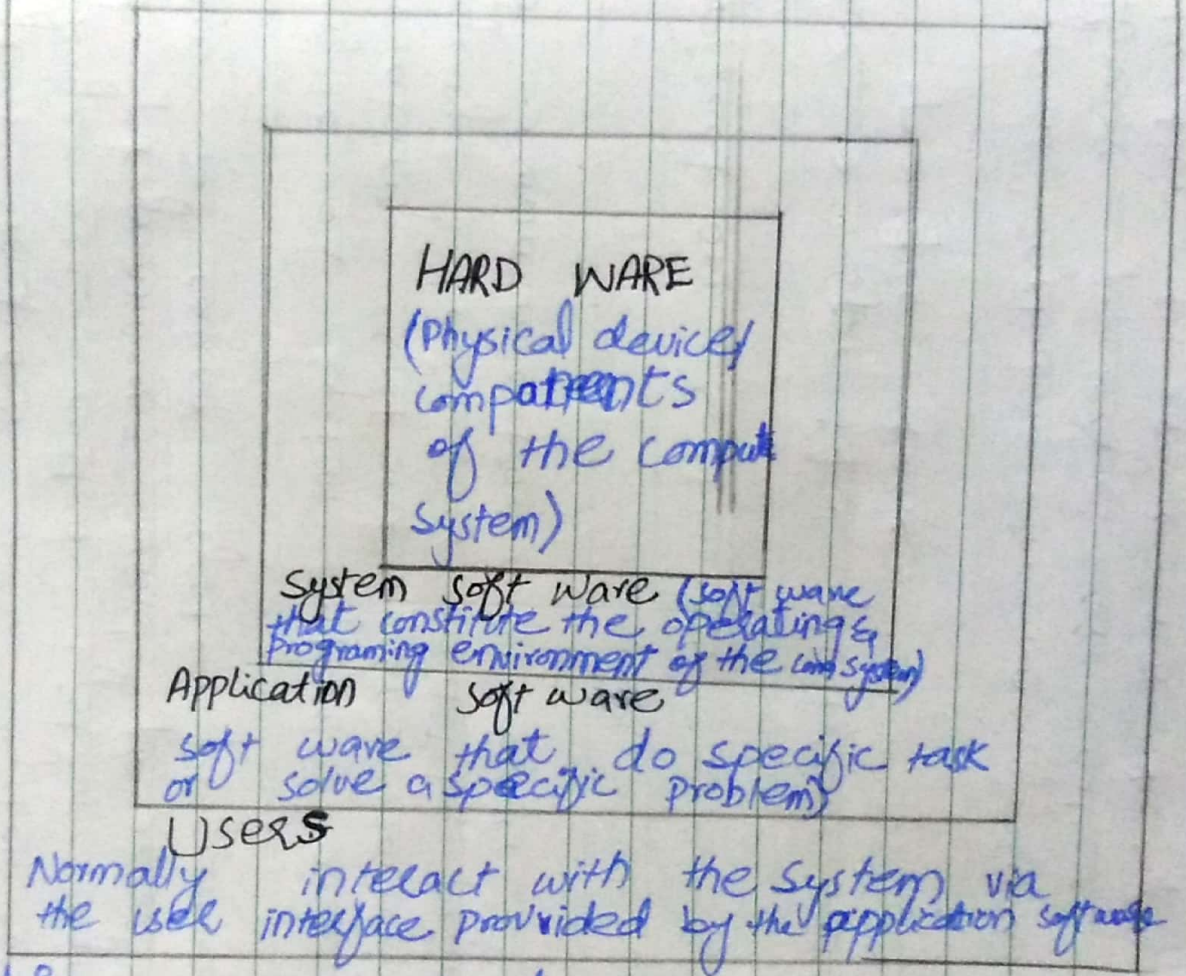
Application Software:

1. Solve a specific problem or do a specific task.

2. programs including in an application software package are called Application programs and the programmer who prepare them are called application programmers.

4. Example of Application software are word processing, inventory management, preparation of tax returns, banking etc.

Scanned with CamScanner



Relashionship among hard ware, system software, application and users of a computer system.

سب سے بڑا اسٹاز اعلیٰ ترین کوالٹی | ڈان پیپر | خود بھی خریدیں اور دوستوں کو بھی بتائیں

Scanned with CamScanner

M T W T F S S

Date:

Q No 4: What is OSI reference model explain each layer of OSI model in details.

Ans:

The OSI Model:

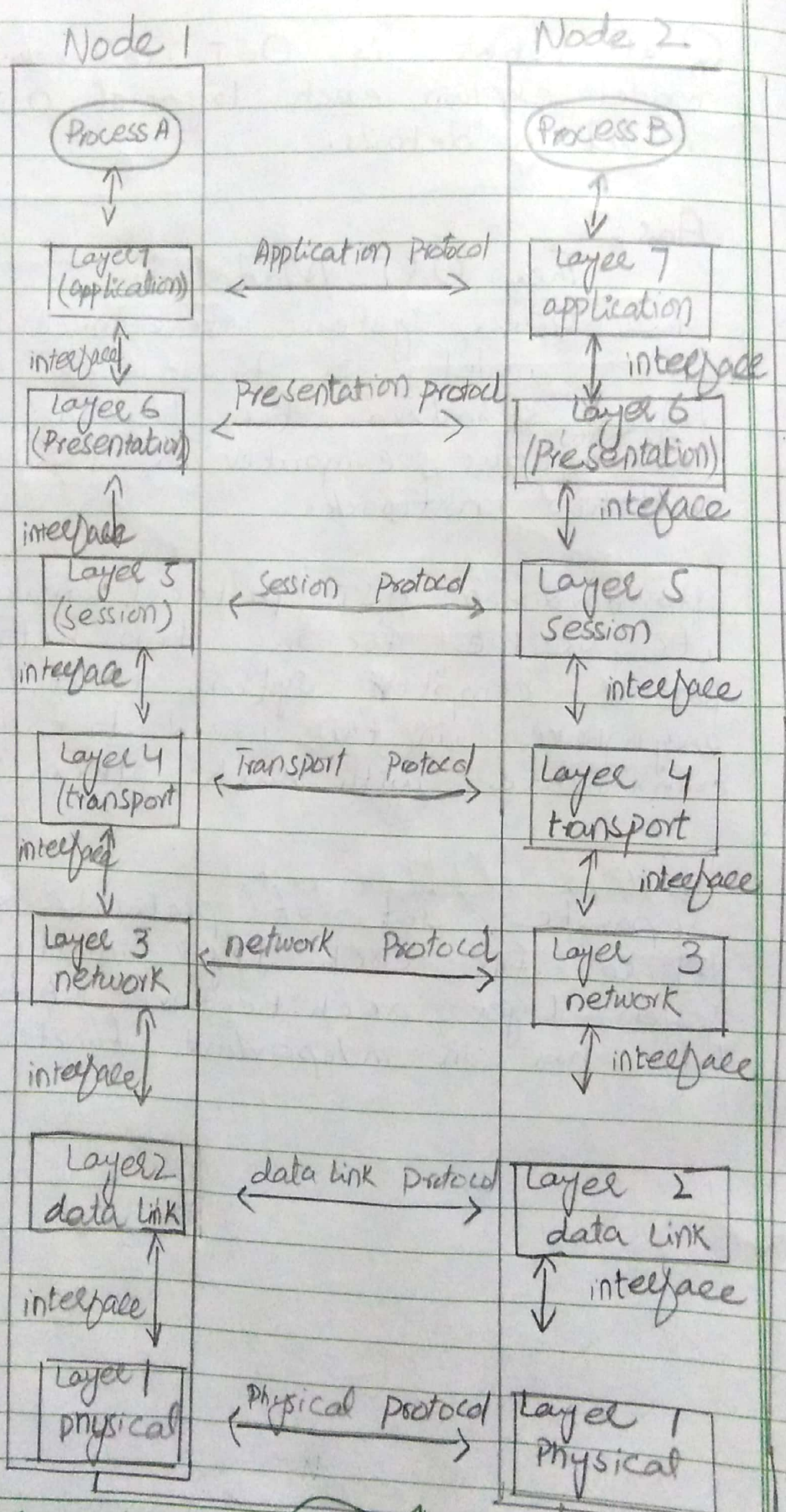
- The Open System Interconnection (OSI) model is framework for define standard for linking heterogeneous computer in a packet switched network.

- Standardized OSI protocol make its possible for any two heterogenous computer system, located anywhere in the world, to easily communicate with each other

- Separate set of protocols is defined for each layer in its seven-layer architecture. Each layer han an independent function.

Scanned with CamScanner

DAWN Imported
M T W T F S S
Date:



خود بھی خریدیں اور دوستوں کو بھی بتائیں ڈان پیپرز سب سے بڑا سائز اعلیٰ ترین کوالٹی

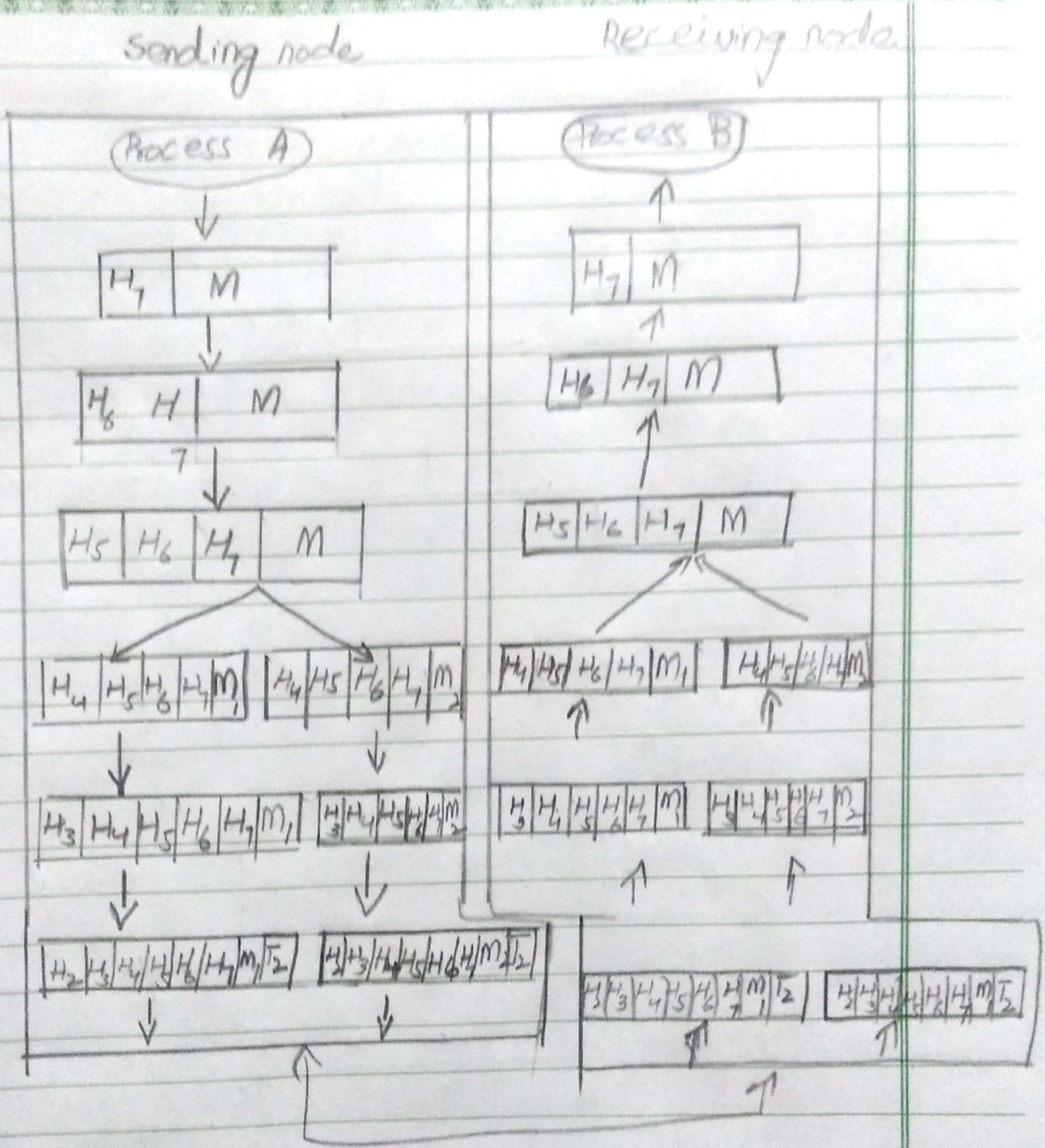
Network

Scanned with CamScanner

DAWN

M T W T F S S

Date:



Scanned with CamScanner

Q No 3:
Write a note on each of the following in details.

Ans:-

1. Modulation Techniques:

- Amplitude Modulation (AM):
  Two binary value (0 and 1) of digital data are represented by two different amplitude of the carrier signal, keeping frequency and phase constant.

- Frequency Modulation (FM):
  Two binary value of digital data are representated by two different frequency, while amplitude and phase are kept constant.

- Phase Modulation (PM):
  Two binary value of digital data are represented by shift in phase of carrier signal.

Scanned with CamScanner

DAWN Imported
M T W T F S S

Date:

2. Switching Techniques:

1. Data is often transmitted from source to destination through a network of intermediate note.

2. Switching technique deal with the methods of establishing communication link b/w the sender and receiver in a communication network.

3. Three commonly used switching techniques are:

- Circuit switching:
  Dedicated physical path is estabished b/w sender and receiver stations through nodes of the network for the duration of communication.

- Massage switching:
  Sender append receiver's destination address to the massage and its transmitted from source to destination either by store-and-forword method or broadcast method.

Scanned with CamScanner

- Packet switching:
  Massage is split up into fixed size packets and each packet is transmitted indepently from source to destination node. Either store-and-forward or broadcast methed is used for transmitted the packet.

3. Multiplexing & DeMultiplexing.

Answer:

- Multiplexing:
  Multiplexer (MUX) is a device which perfore the multiplexing process. It is a hardware component that combines multiple analog or digital input signals into a single line of transmission.

De Multiplexing:
Demultiplexer is a device that perform the reverse process of multiplexer. it is the reverse of multiplexing process.

Scanned with CamScanner

DAWN
M T W T F S S

Date:

Multiplexer (Mux)

1. In communication system: Increase the efficiency of the communition system by allowing the transmission of data, such as audio and video data transmission.

2. In computer Momery: keep up a vast among of momery in the computer and decrease the number of copper line necessary to connect ~~ther~~ to ther part of computer as well.

DeMultiplexer: (DeMux)

1. In communication system: receives the output signal from the multiplex and convert them back to the original from at receiver end.

2. In Arithmetic logic unit: The output of the ALU is fed as an input to the Demux, and the o/p of the demux is connected to multiple register.

Scanned with CamScanner

DAWN Imported
M T W T F S S

Date:

4. Optical Fiber Communication System:

Optical Fiber Communition is a method of transmission from one place to another by sending pulses of infrared light through an optical-fiber.

The light is a from of corriev wove that is modelated to carry information. Fiber is pre form over electical cabling when high bandwidth long distance, or immunity to electromagnetic interferedce is required.

This type of communication can tranmifed voice, video and telemetry through local area network

Optical fiber is wed to many telecommunication companies to telephone signal, internet communication, and cable tele-vision signals.

Scanned with CamScanner

DAWN Imported
M T W T F S S

Date:

Q No 1:
Write a note Multimedia and its types with common media for a storage access and transmission.

Answer

Multimedia:

1. Media is something can be used for presentation of information.
2. Two basic ways to present some information are:

1. Unimedia presentation:
Single media is used to present information.

2. Multimedia presentation:
More than one media is used to present information.

3. Multimedia presentation of any information greatly enhance the comprehension capability of the user it involves use of more of our senses.

Common Media:
common media for stoge access and transmission of information are:

Scanned with CamScanner

DAWN Imported

M T W T F S S

Date:

1. Text (alphanumeric characters)
2. Graphics (line drawing and image)
3. Animation (moving image)
4. Audio (sound)
5. Video (videographed real life event)

- Multimedia in formation technology refers to use of more than one of these media for information presentation to user.

Scanned with CamScanner