# May 2017 COMPUTER HARDWARE & NETWORKING (DEE S6)



# 1. Choose the correct answer from the given alternatives (any twenty): 1x20

i) Power Supply unit of a personal computer is – (a) UPS (b) SMPS (c) Battery (d) None of these.

#### Ans: SMPS

A **power supply unit** converts mains AC to low-voltage regulated DC power for the internal components of a computer and all modern personal computers use **switched-mode power supplies** for this operation.

ii) How many pins does a SIMM have? (a) 50 (b) 30 (c) 72 (d) 168.

**Ans:** Different types of SIMM pins: 30-pin (8-bit) SIMMs or 72-pin (32-bit) SIMMs and another variant is Apple 64-pin.

So answer is: both (b) and (c) are correct.

iii) Which of the following storage devices allows access to information in a sequential mode? – (a) CD-R (b) DVD (c) Hard disk (d) Magnetic tape.

# Ans: (d) Magnetic tape

iv) Which one is not an output device? (a) Printer (b) Monitor (c) Keyboard (d) Modem.

### Ans: (c) Keyboard

v) TCP/IP model does not have \_\_\_\_\_ layer but OSI model have this layer. (a) session layer (b) presentation layer (c) application layer (d) both (a) and (b).

# Ans: (d) both (a) and (b

vi) Which transmission media has the highest transmission speed in a network? (a) coaxial cable (b) twisted pair cable (c) optical fiber (d) electrical cable.

# Ans: (c) optical fiber

vii) What is BIOS an acronym for? (a) bootstrap initial operating system (b) basic input output startup (c) boot initial operating startup (d) basic input output system.

#### Ans: (d) basic input output system.

viii) Which values are held in CMOS for the hard drive (a) size (heads, cylinders, sectors) (b) IRQ (c) Free space (d) Virus alert.

Ans: (a) size (heads, cylinders, sectors)

ix) A ZIF socket was put on the motherboard to help with inserting and removing? (a) CPUs (b) SIMMS (c) DIMMS (d) CPU FANS.

## Ans: (a) CPUs

**ZIF** full form is **zero insertion force socket**, the ZIF socket was designed by Intel and included a small lever to insert and remove the computer processor.

x) Which is not a valid AMD CPU? (a) K6 (b) K8 (c) K5 (d) Athlon.

### Ans: (b) K8

K5, K6, Athlon, Duron, and Sempron are different AMD CPU.



xi) Which of the following retains the information it's storing when the power to the system is turned off? (a) CPU (b) ROM (c) DRAM (d) DIMM.

### Ans: (b) ROM

xii) A COM port is a \_\_\_\_\_ port. (a) parallel (b) serial (c) SCSI (d) SATA.

#### Ans: (b) Serial

**Related Concept: COM**munication port is a serial port. Example of Parallel port is DB-25 connector. It is often used for a parallel printer port on IBM PC compatible computers,

xiii) Which of the following is NOT a type of computer hard drive? (a) IDE (b) FDD (c) SCSI (d) EIDE.

### Ans: (b) FDD

Explanation: Full form of IDE is Integrated Drive Electronics, IDE is generally two types: ATA or PATA (parallel ATA) and SATA (serial ATA). ATA stands for Advanced Technology Attachment

Full form of SCSI is Small Computer System Interface, SCSI is pronounced as "Scuzzy" and is one of the most commonly used interface for disk drives.

Full form of EIDE is "Enhanced Integrated Drive Electronics." EIDE is an improved version of the IDE drive interface that provides faster data transfer rate.

So Hard Disk Drive Interfaces are:

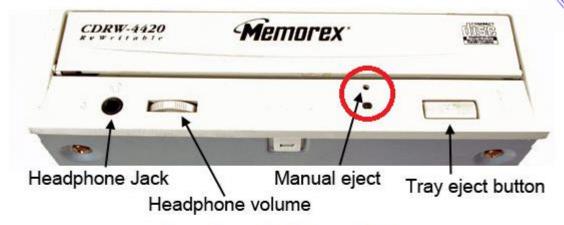
There are several standards connected with the Hard Disk Drives these are:

- IDE/EIDE
- SCSI
- Serial ATA or SATA
- PATA

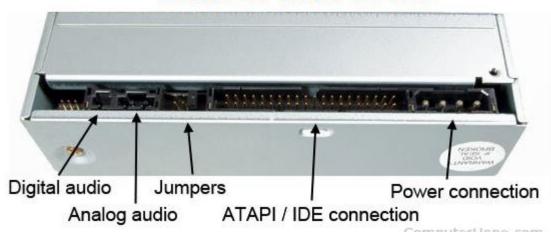
xiv) How should you open the tray on an inoperative CD-ROM drive? (a) Push the eject button, (b) Push in on the lower-right corner door, (c) Right-click the CD icon and select Eject, (d) Insert a paper clip into the CD drive eject hole.

Ans: d) Insert a paper clip into the CD drive eject hole.

# Front of Disc Drive



# Back of Disc Drive



xv) An internal modem is usually connected to a computer via a(an) (a) PCI slot (b) AGP slot (c) USB port (d) PCI Express slot.

# Ans: (a) PCI slot

Related Concept: DSL routers, the most common form of DSL modem, are external to the computer and wired to the computer's **Ethernet port or its USB port**.



xvi) In a dot matrix printer what strikes the print ribbon to form an image? (a) Head's Pins (b) Trip Hammers (c) Character Wheel (d) Electromagnets.

### Ans: (a) Head's Pins

The pins strike an ink-coated ribbon and force contact between the ribbon and the paper, so that each pin makes a small dot on the paper. The combination of these dots forms a dot matrix image. Dot matrix printing, sometimes called impact matrix printing, is a computer printing process in which ink is applied to a surface using a relatively low-resolution dot matrix for layout. Dot matrix printers typically use a print head that moves back and forth or in an up-and-down motion on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like the print mechanism on a typewriter or line printer. However, a dot matrix printer is able to print arbitrary patterns and not just specific characters.

The perceived quality of dot matrix printers depends on the vertical and horizontal resolution and the ability of the printer to overlap adjacent dots. 9-pin and 24-pin are common; this specifies the number of pins in a specific vertically aligned space. With 24-pin printers, the horizontal movement can slightly overlap dots, producing visually better quality output

xvii) What is the name of the process that laser printers use to produce a printed image? (a) Laser writing (b) Micro-laser printing (c) Electro-photographic (d) Ink-jet laser photographic.

#### Ans: (c) Electro-photographic

**Explanation:** Laser printing is an electrostatic digital printing process. It produces high-quality text and graphics (and moderate-quality photographs) by repeatedly passing a laser beam back and forth over a negatively charged cylinder called a "drum" to define a differentially charged image.

Related Question / Concept: What is DPI used in printing and image processing? Full form of DPI is Dots Per Inch. It is a memory requirement used in a square of dots per inch, so 600 dpi requires a minimum of 4 MB memory space for monochrome color.

xviii) TCP/IP model was developed \_\_\_\_\_ the OSI model. (a) prior to (b) after (c) simultaneous to (d) none of the mentioned.

#### Ans: (a) prior

The TCP/IP model, which is realistically the Internet Model, came into existence about 10 years before the OSI model.

xix) Header of a frame generally contains (a) synchronization bytes (b) addresses (c) frame identifier (d) all of the mentioned.

### Ans: (d) all of the mentioned.

Explanation: In a frame, the header is a part of the data that contains all the required information about the transmission of the file. It contains information like synchronization bytes, addresses, frame identifier etc. It also contains error control information for reducing the errors in the transmitted frames.

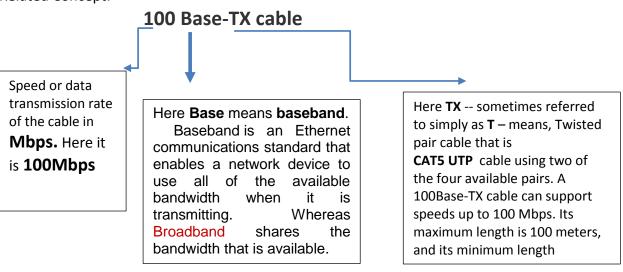
xx) When displaying a web page, the application layer uses the (a) HTTP protocol (b) FTP protocol (c) SMTP protocol (d) none of the mentioned.

## Ans: (a) HTTP protocol

xxi) What is the minimum cable type 100BaseTX specifies ? (a) Category 3 (b) Category 4 (c) Category 5 (d) Category 6.

# Ans: (c) Category 5 that is CAT5





### • 100Base-FX means:

FX, in this term, means it's a fiber-optic cable and supports speeds up to 100 Mbps. The maximum length for a 100Base-FX cable is usually up to 2 kilometers.

xxii) Which one of the following is the multiple access protocol for channel access control? (a) CSMA/CD (b) CSMA/CA (c) both (a) and (b) (d) none of the mentioned.



