

Sheet3: Displays & Printers

Question1 (mcq)

1. Examples of computer monitors (d)

- a. LCD
- b. LED
- c. CRT
- d. All of the above

2. 17 inch computer monitor has diagonal length of (b)

- a. 30 cm
- b. 42 cm
- c. 60 cm
- d. 80 cm

3. Examples of computer monitor interfaces (d)

- a. VGA
- b. SVGA
- c. HDMI
- d. All of the above

4. HDMI means (a)

- a. High definition multimedia interface
- b. High definition Memory Interface
- c. High data multimedia interface
- d. High data memory interface

5. HDMI cables transmit (c)

- 6. Video data
- 7. Audio data
- 8. Video and audio data
- 9. None of the above

6. The higher number of computer monitor pixels gives us a __ image (a)

- a- Better
- b- Worst
- c- Smaller
- d- None of the above

7. Examples of computer printers(d)

- a- Dot matrix
- b- Ink jet
- c- Laser
- d- All of the above

8. Examples of printers interfaces(d)

- a- USB
- b- Serial
- c- Network
- d- All of the above

9. The resolution of printers as dpi means(a)

- a- Dot per inch
- b- Data per inch
- c- Data per industry
- d- Dot per image

10. The speed of printing of computer printers is described as(a)

- a- Page per minute
- b- Page per hour
- c- Page per day
- d- Page per second

Question 2

a- Compare between CRT monitors and LCD monitors

b- Compare between inkjet printers and laser printers

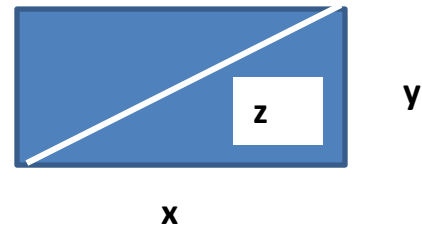
Laser : faster , more cost , use toner

Inkjet : slow , less cost , use ink cartridge

Question3

A 25 inch computer monitor has aspect ratio of 16:9.

Find x,y and z in cm.



Solution:

$$Z = 25 \times 2.54 = 63.5 \text{ cm}$$

$$\frac{x}{y} = \frac{16}{9} \approx \approx$$

$$z = \sqrt{x^2 + y^2}, \quad z = y \sqrt{1 + \left(\frac{x}{y}\right)^2}, \quad 63.5 = y \sqrt{1 + \left(\frac{16}{9}\right)^2}$$

$$63.5 = y \times 2.1$$

$$y \approx 30 \text{ cm}$$

$$x = 30 \times \frac{16}{9} \approx 51 \text{ cm}$$

Question4

Find the size of computer memory(bytes) needed when the used computer monitor has resolution of 1024x768 and 256 colors .

Solution

Each pixel uses 256 colors = 2^8 , 8 bits (one byte)

Memory needed = $1024 \times 768 \times 8$ bits = 1024×786 bytes

Question5

A laser printer has 300 pages per minute and 1200 dpi. Find the time needed to print
10 MB file if each page has data size of 200KB.

Solution

$$\# \text{ pages} = 10 \times 1024 \times 1024 / 200 \times 1024 = 0.05 \times 1024 = 51.2 = 52 \text{ pages}$$

$$\text{Time of printing} = (52/300) \times 60 = 10 \text{ seconds}$$