Exam Report: 4.3.7 Practice Questions

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Overall Performance

Your Score: 23%

Passing Score: 80%

View results by: ◯ Objective Analysis   ⦿ Individual Responses

Individual Responses

▼ **Question 1:**   <u>Incorrect</u>

Which of the following display technologies require backlighting? (Select TWO)

- ☑ ~~Plasma~~
- ☐ DMD
- ☐ OLED
- ➡ ☐ LCD
- ➡ ☑ LED

Explanation

Edge-Lit White LED (EL-WLED or WLED) displays use white LEDs along one edge (usually the top) of the LCD and a light diffuser to backlight the screen. Modern LCDs use and array of LEDs (light-emitting diodes) to backlight the screen. OLED monitors and plasma monitors don't require a backlight. The DMD is a small chip that contains millions of tiny mirrors that can redirect light extremely fast inside DLP projectors.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_BACKLIGHT]

▼ **Question 2:**   <u>Correct</u>

You work as the IT administrator for a small news station. Jill, an employee in building 2, works in the audio/video editing department and would like to increase her productivity. For example, she would like to be able to run multiple programs simultaneously and be able to compare video clips side-by-side.

Which of the following configuration changes would provide the BEST solution for Jill?

- ◯ Grant Jill access to a remote workstation.
- ➡ ⦿ Configure Jill's computer to have dual monitors.
- ◯ Configure Jill's computer with a higher resolution.
- ◯ Provide Jill with a second computer.

Explanation

Dual monitors have been proven to increase productivity by 20-30 percent. Providing Jill with a second monitor will allow her to easily compare her video clips side-by-side by placing different clips on each monitor. Adding a second computer would be very expensive and would make Jill's work more difficult because of the challenges of working on separate computers. Configuring Jill's computer with a higher resolution may help if it is available, but she would still be limited in the amount of space available to view and work with her files.

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_DUAL_MONITORS]

▼ **Question 3:**   Incorrect

A company is purchasing new laptops for their graphic artist division.

Which of the following display technologies provides better contrast and deeper blacks, resulting in better picture quality?

- ⦿ ~~LCD~~
- ◯ DLP
- ➡ ◯ OLED
- ◯ Plasma

Explanation

An organic light-emitting diode (OLED) displays don't require a backlight. While this means that they do not perform as well as LCD displays in lighted areas, they have a much better contrast ratio with deeper blacks.

Liquid crystal displays (LCDs) dominate the laptop display market, but require a backlight and have a lower contrast ratio.

Digital light processing (DLP) is used in projectors.

While plasma display panels have a better contrast ratio than LCD displays, the technology is not suitable for laptop displays because of their smaller size and larger power consumption.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LAPTOP_DISPLAYS_01]

▼ **Question 4:**   Incorrect

Match the LCD type with the feature/benefit/characteristic.

The least expensive, thinnest, most widely used type of LCD

~~RGB-LED~~	WLED - White LED

Able to dim specific regions of the screen

✔ Full-array WLED

Superior accuracy -- most expensive type of backlighting technology

~~WLED - White LED~~	RGB-LED

Produces better colors than WLED, but consumes more energy.

✔ CCFL

Explanation

Edge-Lit White LED (EL-WLED or WLED) displays use white LEDs along one edge (usually the top) of the LCD and a light diffuser to backlight the screen. EL-WLED LCDs are the least expensive, thinnest, and most widely used type of LCD.

- Full-array WLED displays have an array of white LEDs behind the screen. Full-array WLED LCDs are able to dim specific regions of the screen, resulting in a much higher contrast ratio than LCDs that use EL-WLED technology.
- RGB-LED displays have an array of special LEDs that are able to emit red, green, and blue light, resulting in superior color accuracy. RGB-LED displays are the most expensive type of backlighting technology.
- Older LCD monitors and some LCD HDTVs use cold cathode fluorescent lamps (CCFLs) for backlighting. CCFLs are able to produce better colors than EL-WLED and full-array WLED technologies, but consume a lot more energy and require an internal inverter.

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LCD]

▼ **Question 5:**   <u>Incorrect</u>

Which of the following terms describes the difference between white and black in an LCD monitor?

- ◉ ~~Pitch~~

- ◯ Aspect ratio

- ◯ Brightness

➡ ◯ Contrast ratio

- ◯ Resolution

Explanation

The contrast ratio identifies the relative difference between white and black. A higher contrast ratio means a better screen.

Pitch is the distance between pixels. Resolution is the number of pixels in the display. Brightness is a measure of the intensity of the light coming from the display. The aspect ratio is the ratio of the width and the height.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LCD_CONTRAST_RATIO]

▼ **Question 6:**   <u>Incorrect</u>

Which of the following is true of modern LCD monitors regarding backlighting?

- ◯ Cold cathode florescent (CCFL) are used for backlighting.

➡ ◯ LEDs are used to backlight the screen.

- ◉ ~~Red, green, and blue light provide the least expensive type of backlighting technology.~~

- ◯ LCD monitors have small cells containing electrically-charged ionized gas that don't need backlighting.

Explanation

Modern LCDs use LEDs (light-emitting diodes) to backlight the screen.

Older LCD monitors use cold cathode fluorescent lamps (CCFLs) for backlighting. Plasma displays use millions of small cells that contain electrically charged ionized gases and don't need backlighting. RGB-LED displays are available on modern LCD displays; they have an array of special LEDs that are able to emit red, green, and blue light, resulting in superior color accuracy, but are the most expensive type of backlighting technology.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LCD_MONITORS]

▼ **Question 7:**   <u>Incorrect</u>

You are putting together a gaming system and need to make sure you get a display that meets your needs. The display needs to have a very good response time, and you would prefer that it be affordable and power-efficient.

Which of the following types of displays will MOST likely meet these needs?

- ◯ Plasma display with no motion blur

- ◉ ~~OLED display with wide-angle viewing~~

➡ ◯ LCD display with TN panel

◯ LCD display with IPS panel

Explanation

LCD displays with TN panels are the most common technology used by LCDs. TN panels have very good response times (1-5 ms) and refresh rates (60-144 Hz), so they are great for PC gaming. They are more affordable and have faster response times than LCDs with IPS panels, use far less power than a plasma display, and are far more affordable than OLED displays.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LCD_TN_VS_IPS_01]

▼ **Question 8:**   Incorrect

You are putting together a system for a graphic artist and need to make sure you get a display that meets her needs. The display needs to have very good color reproduction quality and viewing angles. The display needs to run cool and be power-efficient.

Which of the following types of displays will MOST likely meet these needs?

◯ Plasma display with no motion blur

➡ ◯ LCD display with IPS panel

⦿ ~~OLED display with wide-angle viewing~~

◯ LCD display with TN panel

Explanation

LCD displays with IPS panels have the best color reproduction quality and viewing angles among LCDs. TN panels have imperfect color reproduction due to the fact that only 6 bits per color can be displayed at poor viewing angles. LCDs with IPS panels use far less power and run much cooler than plasma displays. They are more expensive than LCDs with TN panels, but are still more affordable than OLED displays.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_LCD_TN_VS_IPS_02]

▼ **Question 9:**   Incorrect

You are a trainer for your company and often teach courses in a classroom located on-campus or in a hotel conference room. In your office, which is separate from the classroom, you have two external monitors connected to your laptop, and you are able to display different content on each monitor. However, when teaching, you only have your laptop and a projection unit. To make teaching easier, you want to the same content to show on both the laptop monitor and the projection screen.
Which of the following multiple display options would be BEST to select when teaching?

◯ Show only on 1.

◯ Show only on 2.

➡ ◯ Duplicate these displays.

⦿ ~~Extend these displays.~~

Explanation

To display the exact same content on your laptop monitor and the projection screen, you will need to duplicate the displays.

Extending the displays allows you to have different content on the laptop monitor than that shown on the projection screen.

Showing on only 1 or 2 will limit the output to either the laptop monitor (1) or the projection screen (2), but not both.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_MULTIPLE_MONITORS]

▼ **Question 10:**   <u>Correct</u>

Lloyd works for a graphic design company. He needs a monitor that accurately represents colors. Lloyd's monitor recently failed, and you have been asked to purchase a new one. You have been asked to find a monitor with a fast pixel refresh rate, low energy consumption, and very accurate colors representation.

Which of the following types of display devices will BEST meet the requirements requested?

    ◯ CRT

    ◯ Plasma

    ◯ LCD

➡ ◉ OLED

Explanation

Organic LED (OLED) displays use light emitting diodes and works without a backlight. OLED provides better picture quality and consumes less power than plasma, CRT, or LCD monitors. OLED also has a very high refresh rate compared to the other options. Cathode-ray tube (CRT) consumes more power. CRT monitors display a lower-quality picture than OLED monitors.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_OLED]

▼ **Question 11:**   <u>Correct</u>

Why are plasma displays smaller than 32 inches not typically sold?

➡ ◉ It would be too cost prohibitive to manufacture plasma screens under 32 inches.

    ◯ Plasma technology needs larger sizes for performance.

    ◯ There are problems with proper gas ionization in the smaller cells.

    ◯ Smaller than 32 inch displays tend to suffer more from image retention and screen burn-in.

Explanation

Plasma displays smaller than 32 inches are not sold because manufacturing them is not profitable.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_PLASMA]

▼ **Question 12:**   <u>Incorrect</u>

What are the disadvantages of plasma display technology (Select TWO)?

➡ ☐ The gasses inside the cells are sensitive to air pressure fluctuations.

    ☐ Plasma displays usually display colors less accurately than LCD displays.

    ☐ Plasma displays have low contrast and cannot produce true black.

➡ ☑ They generate much more heat than other display types.

    ☑ ~~Plasma displays consume less than two to three times as much power as LCDs.~~

Explanation

Plasma displays generate much more heat than other display types.
The gasses inside the cells are sensitive to air pressure fluctuations.

Plasma displays have several advantages:

• Plasma displays usually display colors more accurately than LCD displays.
• Because no backlighting is used, plasma displays have high contrast and can produce true black (displays that use backlighting can only display very dark grey).
• Plasma displays have almost no motion blur due to the speed of the gas reaction and the way they draw frames. Because of this, most plasma displays do not specify response times.

Plasma displays have several disadvantages:

• Plasma displays consume two to three times as much power as LCDs.
• They generate much more heat than other display types.
• The gasses inside the cells are sensitive to air pressure fluctuations.
• Plasma displays also suffer from a problem known as image retention (IR). Static images that are displayed for a long time cause the phosphors to overheat, which creates a temporary shadow of the image that is visible even when the display is turned off. If the static image was displayed for too long, screen burn-in can occur, and the shadow image will be permanent.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_PLASMA2]

▼ **Question 13:**   Incorrect

Ida, one of the employees in the sales department, needs a way to display her PowerPoint sales presentation to a large group of potential customers. She has asked you to set up the conference room in preparation for her presentation. You will need to purchase a display system for the conference room.

Which of the following display systems would be the BEST to purchase?

➡ ◯ A large screen and a projector

 ◉ ~~A large LCD monitor~~

 ◯ A large Plasma monitor

 ◯ A large OLED monitor

Explanation

Since Ida is presenting to a large group, most monitors would be too small to view from the back of a room. Therefore, using a projector and screen will provide the best view of her presentation.

References

TestOut PC Pro - 4.3 Display Devices
[e_disp_pp6.exam.xml Q_DISP_DEV_PROJECTOR]