

DO NOT WRITE ON TEST



**Digital Communications &
Design Concepts**

~OPEN EVENT~

490

REGIONAL 2025

CONCEPT KNOWLEDGE:

Multiple Choice (50 @ 2 points each) _____ (100 points)

Test Time: 60 minutes

GENERAL GUIDELINES:

Failure to adhere to any of the following rules will result in disqualification:

1. Contestant must hand in this test booklet and all printouts if any. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.
4. For any interest calculations, assume a 360-day year.
5. Unless otherwise stated, assume that all plant assets were purchased on January 1.
6. Unless otherwise stated, assume that the overtime rate is 1.5 regular time pay for any hours worked in excess of 40 hours per week.

Multiple Choice Questions

Directions: Identify the letter of the choice that best completes the statement or answers the question.

1. When designing a brochure for a travel agency, what is the most important principle to ensure the layout is effective?
 - A. Using a single font type for consistency.
 - B. Choosing vibrant colors to make it stand out.
 - C. Balancing elements for visual appeal and easy navigation.
 - D. Applying the maximum number of graphics to fill up space.
2. In creating a new logo for a tech startup, how should typography be utilized to communicate innovation?
 - A. By selecting a traditional serif font.
 - B. Using a modern, clean sans-serif font.
 - C. Incorporating a handwritten script font.
 - D. Utilizing a variety of fonts for each letter.
3. While designing a poster for a concert, which of the following would be an effective use of color?
 - A. Employing a monochromatic color scheme for simplicity.
 - B. Using complementary colors to enhance readability.
 - C. Choosing clashing colors to grab attention.
 - D. Using a single bright color for all text and backgrounds.
4. How can lines be used effectively in a corporate report to enhance readability and design?
 - A. By adding decorative lines between every paragraph.
 - B. Using lines to create margins and separate sections.
 - C. Incorporating zigzag lines for visual interest.
 - D. Using thick, bold lines for all text underlining.
5. When adding graphics to a website, what is a key consideration to ensure they enhance the user experience?
 - A. Making sure all graphics are the same size.
 - B. Using high-resolution images only.
 - C. Ensuring graphics are relevant and support content.
 - D. Placing as many graphics as possible on the homepage.
6. In the layout of a magazine article, how should shapes be used to improve the aesthetic appeal?
 - A. By using complex shapes to frame the text.
 - B. Incorporating subtle shapes to guide the reader's flow.
 - C. Filling empty spaces with random shapes.
 - D. Using a single shape repetitively throughout the page.

7. In creating a visual presentation, how should the rule of thirds be applied for a dynamic layout?
 - A. Placing the most important elements in the center square.
 - B. Dividing the slide into thirds and placing key elements along these lines or intersections.
 - C. Ignoring the rule for a more freeform approach.
 - D. Using the rule to divide the slide into equal quarters.
8. For a book cover design, why is the choice of color critically important?
 - A. Because it must reflect the genre and set the right mood.
 - B. To ensure it stands out on black-and-white displays.
 - C. Because certain colors are cheaper to print.
 - D. To match the author's favorite colors.
9. When adding text over a busy background image on a website, what technique improves readability?
 - A. Choosing a font color that closely matches the background.
 - B. Placing a semi-transparent overlay between the text and background.
 - C. Using a decorative font for contrast.
 - D. Applying a glow effect around the text.
10. How does the use of white space benefit a complex infographic design?
 - A. By filling it with more data and graphics to utilize space.
 - B. It makes the design look unfinished and sparse.
 - C. Enhancing focus on the most important data through strategic placement.
 - D. White space is only beneficial in minimalistic designs.
11. To respect copyright laws, what must a designer do when incorporating an iconic photograph into a commercial project?
 - A. Modify the photo slightly to claim it as original.
 - B. Obtain permission or a license from the copyright holder.
 - C. Use the photo as is, since it's widely recognized and already public.
 - D. Credit the photographer in small print on the back.
12. When selecting fonts for a health and wellness blog, what aspect of typography should be prioritized to reflect tranquility and harmony?
 - A. Choosing fonts with sharp edges to convey energy.
 - B. Using bold fonts for emphasis on wellness.
 - C. Selecting soft, rounded fonts that evoke calm.
 - D. Implementing a variety of fonts to represent diversity.
13. What is the best practice for using graphics in an educational textbook?
 - A. Utilizing graphics as the primary source of information.
 - B. Decorating each page corner with thematic graphics.
 - C. Integrating relevant graphics that complement the text and aid understanding.
 - D. Choosing random graphics to fill empty spaces.

14. To avoid copyright infringement when designing a website, what is a key consideration when using images?
- A. Only use images found through a general internet search, as they are considered public domain.
 - B. Create all images from scratch to ensure originality.
 - C. Utilize images with Creative Commons licenses or purchase stock photos.
 - D. Assume all images over 10 years old are no longer copyrighted.
15. When designing an email campaign for a luxury brand, what element should be emphasized to convey exclusivity and elegance?
- A. Using a wide range of colors to appear vibrant and exciting.
 - B. Incorporating minimalistic design and neutral colors.
 - C. Filling the email with as many product images as possible.
 - D. Emphasizing the price and discounts heavily.
16. In creating a campaign poster for a social cause, how should the message be visually communicated to ensure impact and clarity?
- A. By using complex vocabulary and detailed imagery to convey depth.
 - B. Employing large, simple text with a clear call to action.
 - C. Incorporating multiple fonts and colors for emphasis.
 - D. Designing it with only text, no images or graphics, for simplicity.
17. For a children's book illustration, what is an effective strategy for using color to engage young readers?
- A. Applying a monochrome palette to focus on the story.
 - B. Using bright, contrasting colors to capture attention and stimulate imagination.
 - C. Limiting colors to shades of blue and green for calmness.
 - D. Choosing only pastel colors to ensure it's not too stimulating.
18. In designing a mobile app for a library, which typography choice ensures readability across various devices?
- A. Using a fixed-size font for all devices.
 - B. Selecting a sans-serif font that scales well across screen sizes.
 - C. Implementing a variety of decorative fonts to enhance aesthetics.
 - D. Choosing the smallest font size to minimize scrolling.
19. What role do lines play in the layout of a professional resume?
- A. To add decorative patterns around the borders.
 - B. Separating sections clearly without distracting from content.
 - C. Using dashed lines for a unique aesthetic appeal.
 - D. Employing varying line widths to represent different levels of information.

20. When selecting background music for a website that sells meditation supplies, what aspect of design is being considered?
- A. The effective use of color to evoke tranquility.
 - B. The incorporation of audio elements to enhance the site's mood.
 - C. The layout and navigational ease of the website.
 - D. The typography used on product descriptions.
21. How can a designer ensure a logo is scalable across different media?
- A. By using detailed graphics to make it look good on large formats.
 - B. Making it complex to capture attention.
 - C. Designing it to be simple and recognizable, even when scaled down.
 - D. Ensuring it contains multiple colors to stand out in any media.
22. How can contrast be used in a photography portfolio website to highlight the photos?
- A. By setting all photos against a bright neon background.
 - B. Utilizing a minimalistic, dark theme to make the photos stand out.
 - C. Using varying shades of gray for the background of each photo.
 - D. Implementing a colorful background for each photo section.
23. When designing a poster for a film festival, how can symmetry be used effectively?
- A. By placing all information in the center for a traditional look.
 - B. Using asymmetrical balance to create a dynamic and interesting layout.
 - C. Applying perfect symmetry to all elements for a formal appearance.
 - D. Ignoring symmetry to focus on abstract designs.
24. For a non-profit organization's annual report, why is it important to use consistent typography throughout the document?
- A. To ensure that it takes up less space.
 - B. To make the document more difficult to read and therefore more exclusive.
 - C. To maintain a professional and cohesive appearance.
 - D. Because using multiple fonts can reduce printing costs.
25. How should a designer approach the use of white space in a minimalist website design?
- A. By filling it with as much information as possible in the footer.
 - B. Using it strategically to create a clean and focused user experience.
 - C. Avoiding it entirely to make the site more colorful.
 - D. Only using white space around the website's logo.
26. When creating a social media ad for a luxury watch brand, which design element should be prioritized to convey sophistication?
- A. Incorporating as many product images as possible into the ad.
 - B. Using vibrant, contrasting colors to make the ad pop.
 - C. Emphasizing minimalistic design and monochromatic color schemes.
 - D. Focusing on large text to make the message clear.

27. When designing a call-to-action button on a website, what is the most effective use of color?
- A. Using the same color as the background for a subtle effect.
 - B. Choosing a color that contrasts with the site's color scheme to make it stand out.
 - C. Applying multiple colors to the button to make it more attractive.
 - D. Selecting a very light color to ensure it blends with the rest of the design.
28. When designing a responsive website, which CSS property is crucial for adjusting the layout based on different screen sizes?
- A. display
 - B. flex-wrap
 - C. @media
 - D. position
29. In the context of web typography, what is the importance of the CSS property line-height for text readability?
- A. Adjusts the spacing between letters.
 - B. Controls the weight of the font.
 - C. Sets the vertical space between lines of text.
 - D. Determines the color of the text.
30. For high-quality print materials, what is the minimum resolution of images in dots per inch (dpi)?
- A. 72 dpi
 - B. 150 dpi
 - C. 300 dpi
 - D. 600 dpi
31. In Adobe Photoshop, which tool is best suited for removing blemishes on a portrait photo?
- A. Clone Stamp Tool
 - B. Brush Tool
 - C. Healing Brush Tool
 - D. Magic Wand Tool
32. When optimizing images for web use, why is the choice between JPEG and PNG formats important?
- A. JPEG is better for text-heavy images, while PNG is for color-heavy images.
 - B. JPEG offers lossy compression, PNG offers lossless compression.
 - C. PNG files are always smaller than JPEG files.
 - D. JPEG is used only for black and white images.
33. In web development, what is the purpose of minifying CSS and JavaScript files?
- A. To enhance the security of the website by obscuring code.
 - B. To improve load times by reducing file size.
 - C. To increase the number of files for better organization.
 - D. To comply with web standards and regulations.

34. For digital images, what is the primary difference between the RGB and CMYK color models?
- A. RGB is for digital displays, while CMYK is for physical print.
 - B. RGB uses hexadecimal values, whereas CMYK uses percentage values.
 - C. CMYK offers a wider color range than RGB.
 - D. RGB images are always larger in file size than CMYK images.
35. When optimizing a website's performance, what does "lazy loading" refer to?
- A. Preloading all images on the website to reduce wait times.
 - B. Loading only the content that is visible in the viewport, with the rest loading on demand.
 - C. Storing images in a local cache to speed up future visits.
 - D. Delaying the loading of JavaScript files until after the page has rendered.
36. What principle does the use of whitespace (or negative space) in design primarily serve?
- A. To increase webpage loading times.
 - B. To reduce the overall amount of text on a page.
 - C. To create a visual hierarchy and improve readability and focus.
 - D. To make the design more colorful and vibrant.
37. What design principle refers to the arrangement of visual elements to create stability in an artwork?
- A. Symmetry
 - B. Balance
 - C. Harmony
 - D. Proportion
38. What is the "signal-to-noise ratio" in audio recording?
- A. The difference in volume between the intended signal and background noise
 - B. The ratio of bass to treble sounds
 - C. The frequency range that a microphone can capture
 - D. The speed at which an audio signal is processed
39. A good rule for the maximum number of different fonts in a design is:
- A. 1
 - B. 2
 - C. 3
 - D. 4
40. In audio editing, what is the purpose of normalization?
- A. To reduce background noise
 - B. To ensure all audio peaks at the same level
 - C. To balance the stereo channels
 - D. To compress dynamic range

41. Pixar Animation Studios is known for what major innovation in animation?
- A. The first use of 3D printing in character design
 - B. The development of the first computer-animated feature film
 - C. The invention of digital cel animation
 - D. The introduction of high-definition animation formats
42. Which term describes the background noise present in a recording or broadcasting environment?
- A. Ambient noise
 - B. White noise
 - C. Feedback
 - D. Echo
43. The animation principle of "follow through" refers to:
- A. The initial action of an animation sequence
 - B. Objects moving at different rates or times after a main action
 - C. The cleanup process after rendering an animation
 - D. The preparation phase before the main animation starts
44. The rule of thirds in composition suggests that:
- A. An image should be divided into nine equal parts by two equally spaced horizontal and vertical lines
 - B. Subjects should be placed along the lines or their intersections
 - C. Only three colors should be used in an image
 - D. Each third of an image should represent a different scene
45. Which is a principle of effective web design?
- A. Symmetry
 - B. Complexity
 - C. Minimalism
 - D. Dissonance
46. Depth of field in a photograph is influenced by:
- A. The camera's ISO setting
 - B. The color profile used
 - C. The lens aperture
 - D. The shutter speed
47. Which of the following file formats supports transparency?
- A. JPEG
 - B. BMP
 - C. GIF
 - D. TIFF

48. Motion blur in animation and video games is used to:
- A. Correct color imbalances
 - B. Simulate the effect of fast movement
 - C. Increase frame rate
 - D. Reduce screen tearing
49. What is kerning in typography?
- A. Adjusting the spacing between lines of text
 - B. Adjusting the spacing between characters in a text
 - C. Changing the font size
 - D. Altering the text color
50. The opacity property in CSS controls:
- A. The transparency level of an element
 - B. The brightness of an element
 - C. The color intensity of an element
 - D. The visibility of an element without affecting layout