

Member ID: \_\_\_\_\_

Time: \_\_\_\_\_

Rank: \_\_\_\_\_



# Digital Communication and Design Concepts (490)

## NATIONAL 2025

### CONCEPT KNOWLEDGE:

Multiple Choice (50 @ 2 points each)

\_\_\_\_\_ (100 points)

### Test Time: 60 minutes

### Multiple Choice Questions

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

1. How can the Golden Ratio be applied to improve website layout design?
  - A. By ensuring all text is the same size.
  - B. Using it to balance the space between elements.
  - C. Applying it to determine font sizes only.
  - D. Using it for color selection exclusively.
2. What is the primary function of the <nav> element in HTML5?
  - A. To define a section for navigation links.
  - B. To create a container for JavaScript-based navigation.
  - C. To automatically generate a site map.
  - D. To style navigation links without CSS.
3. Which video transition technique is best for indicating the passage of significant time between scenes?
  - A. Cut
  - B. Dissolve
  - C. Wipe
  - D. Fade to black
4. What role do lower thirds play in video production?
  - A. To display the video's title at the bottom of the screen.
  - B. To indicate the end credits.
  - C. To provide additional information about the on-screen content, typically a name or location.
  - D. To show subtitles for dialogue.
5. In designing a webpage, how can CSS Flexbox be utilized to solve layout problems?
  - A. To create a multi-column layout that adjusts to the size of the viewport.
  - B. To add animations to webpage elements.
  - C. To apply complex filters to images.
  - D. To ensure that all text is displayed in a single, long column.
6. How does the transition property in CSS contribute to video editing effects on web pages?
  - A. By enabling background color changes in response to user interaction.
  - B. It allows elements to change size based on user actions.
  - C. It creates smooth visual effects when changing properties like color or opacity.
  - D. By auto-playing videos when the page loads.

7. What is the purpose of the HTML <video> element?
  - A. To embed video content in a web page.
  - B. To create a container for video files to be downloaded.
  - C. To link to video streaming services.
  - D. To set up live video feeds only.
8. Which geometric method can be used to ensure elements on a web page are aligned and spaced consistently?
  - A. The Rule of Thirds
  - B. Symmetry
  - C. The Fibonacci Sequence
  - D. Grid Systems
9. In video editing, what is the effect of a "J Cut"?
  - A. The transition to a new scene before the current audio finishes.
  - B. Audio from the next scene starts before the video transition.
  - C. A quick jump in the same scene to show time passing.
  - D. Repeating the last second of audio to emphasize a point.
10. How are visual effects like CGI most effectively used in video production?
  - A. To replace all practical effects for consistency.
  - B. Sparingly, to enhance but not overpower the story.
  - C. To create realistic backgrounds only.
  - D. As the primary method for storytelling.
11. What HTML5 element is specifically designed for drawing and manipulating graphics on a web page?
  - A. <canvas>
  - B. <svg>
  - C. <figure>
  - D. <img>
12. Which principle should be followed when integrating titles into a video?
  - A. Ensuring titles are only at the beginning of the video.
  - B. Using the same font and style for all titles for consistency.
  - C. Placing titles over action scenes to maintain viewer interest.
  - D. Making titles as long as possible for readability.
13. What is the benefit of using the <header> element in HTML5?
  - A. It increases the page loading speed.
  - B. It is used to define introductory content, navigation, or logos at the top of a web page.
  - C. It automatically creates a table of contents.
  - D. It makes the text inside it bold by default.

14. How can the principle of balance be applied in web design to solve layout issues?
- A. By ensuring all page elements have equal weight and distribution, either symmetrically or asymmetrically.
  - B. By placing the most important content at the top of the page only.
  - C. By using a single column layout for all content.
  - D. By making all interactive elements the same size.
15. What is a key consideration when adding visual effects to a webpage with HTML and CSS?
- A. Ensuring that effects do not hinder the readability of content.
  - B. Using as many different effects as possible for visual interest.
  - C. Applying visual effects to every element on the page.
  - D. Limiting visual effects to header elements only.
16. How can geometric shapes be used to enhance the visual composition of a webpage?
- A. By using a single shape repeatedly for a minimalist look.
  - B. To create a complex background that stands out.
  - C. As containers for text and images to guide the user's focus.
  - D. To hide unnecessary elements from the user.
17. What is the primary use of the <aside> element in HTML5?
- A. To mark content that is tangentially related to the content around the <aside> element.
  - B. To define the main navigation menu.
  - C. To highlight critical information only.
  - D. To create a sidebar for advertising exclusively.
18. In the context of video editing, how does a cross dissolve transition affect the narrative?
- A. It suggests a close connection or continuity between scenes.
  - B. It is used to indicate a break or pause in the narrative.
  - C. It typically signifies a flashback or memory.
  - D. It is used to show a change in the point of view.
19. Why is it important to use titles and lower thirds correctly in videos?
- A. To ensure viewer engagement throughout the video.
  - B. To attribute credit to sources and contributors accurately.
  - C. To provide context and background information to the audience.
  - D. To make the video more visually appealing.
20. What technique in CSS is best for creating shapes like circles or triangles that can be used in design layouts?
- A. Using the border-radius property for circles and border tricks for triangles.
  - B. Applying SVG images for all shapes.
  - C. Embedding external graphics only.
  - D. Utilizing the <shape> element, which does not exist.

21. What CSS property is essential for creating layouts with a geometric approach, such as using the Golden Ratio?
- A. margin
  - B. grid-template-columns
  - C. aspect-ratio
  - D. clip-path
22. How can the HTML <figure> element be utilized in conjunction with geometric design principles?
- A. To define independent content, like diagrams or illustrations, that is referenced in the main content.
  - B. To automatically generate geometric shapes as placeholders for images.
  - C. To create captions for complex geometric patterns.
  - D. To clip images and graphics into geometric shapes using CSS properties.
23. In video editing, which effect is typically used to merge scenes seamlessly in a narrative that spans different times or locations?
- A. Crossfade
  - B. Jump cut
  - C. L cut
  - D. Hard cut
24. For web development, which HTML5 tag is specifically designed to handle embedded video files, supporting geometric modifications via CSS?
- A. <embed>
  - B. <video>
  - C. <media>
  - D. <object>
25. When integrating lower thirds into a video, what technique is used to ensure they don't distract from the main content?
- A. Using a transparent background.
  - B. Animating them to exit the screen quickly.
  - C. Placing them at the top of the screen instead of the bottom.
  - D. Using high-contrast colors.
26. Which CSS feature is instrumental in creating responsive designs that adapt to the geometry of the screen size and orientation?
- A. Media Queries
  - B. Flexbox
  - C. CSS Grid
  - D. CSS Variables

27. What geometric principle is vital in the aspect ratio transformation of videos to fit different viewing platforms without losing content quality or integrity?
- A. The Rule of Thirds
  - B. The Fibonacci Sequence
  - C. Symmetry
  - D. The Golden Ratio
28. How is SVG used in web design to apply geometric methods for creating scalable and responsive graphics?
- A. By utilizing its XML-based file format to define graphics in terms of paths and shapes.
  - B. Through embedding directly in HTML, allowing CSS and JavaScript manipulation.
  - C. By converting all images to SVG for uniformity.
  - D. By restricting the design to basic shapes for faster loading.
29. What HTML element is crucial for adding accessible titles to figures and illustrations within web content?
- A. <figcaption>
  - B. <header>
  - C. <title>
  - D. <label>
30. Which video transition is best for showing a connection or continuity between two seemingly unrelated scenes?
- A. Match cut
  - B. Wipe
  - C. Dissolve
  - D. Freeze frame
31. In CSS, how can the clip-path property be applied to create geometrically shaped images that complement a web design's overall aesthetic?
- A. By defining a clipping region to set which part of an image is visible.
  - B. By adjusting the image's color saturation to match the geometric theme.
  - C. By increasing the border radius until the desired shape is achieved.
  - D. By overlaying images with geometric patterns for depth.
32. What is the purpose of utilizing the perspective property in CSS when dealing with geometric aspects of web design?
- A. To give a 3D positioned element some perspective.
  - B. To adjust the view angle of 2D elements.
  - C. To create a geometric pattern in the background.
  - D. To force elements into a specific geometric shape.

33. How does adjusting the frame rate of a video affect its transition smoothness and overall viewing experience?
- A. Higher frame rates result in smoother transitions and can improve the realism of motion.
  - B. Lower frame rates create a more cinematic feel by adding motion blur.
  - C. A constant frame rate ensures compatibility across all devices.
  - D. Frame rate adjustments have no impact on video transitions or quality.
34. What technique in HTML5 can be used to draw geometric shapes dynamically on a webpage?
- A. Utilizing the <canvas> element with JavaScript for drawing and animation.
  - B. Embedding SVG directly into HTML.
  - C. Using the <geom> tag to define shapes directly in HTML (Note: <geom> is a fictional tag for context).
  - D. Applying CSS shapes directly to <div> elements.
35. When implementing titles in video editing, which technique ensures readability across various devices and resolutions?
- A. Selecting a responsive font size relative to the viewport dimensions.
  - B. Maintaining a consistent font style and size across all titles.
  - C. Using drop shadows to enhance text contrast against backgrounds.
  - D. Ensuring titles are only placed in the lower third of the screen.
36. How is geometric proportionality ensured in responsive web design when dealing with images and video content?
- A. Using the object-fit property to maintain aspect ratios.
  - B. Applying fixed pixel dimensions to all media elements.
  - C. Utilizing vector images exclusively for all media types.
  - D. Embedding media using iframe tags only.
37. What advanced CSS technique allows for the manipulation of an element's background to create geometric patterns?
- A. The background-blend-mode property.
  - B. The background-clip property.
  - C. The background-size property.
  - D. The background-origin property.
38. In the context of video editing, how are visual effects (VFX) most effectively utilized?
- A. To correct errors or imperfections in the filmed footage.
  - B. As the primary storytelling mechanism, replacing traditional narrative methods.
  - C. To enhance or complement the narrative without overshadowing the story.
  - D. To completely replace the need for live-action footage.

39. What HTML5 feature allows for the live manipulation and animation of geometric shapes within a web application?
- A. The <animate> tag.
  - B. The JavaScript API for HTML5 <canvas>.
  - C. CSS animations applied to SVG elements.
  - D. HTML5 Geolocation API for dynamic positioning.
40. How do lower thirds in video production benefit from the use of motion graphics and animation techniques?
- A. By making them interactive for viewers.
  - B. To subtly introduce them into the scene without abrupt changes to viewer focus.
  - C. To enable click-through actions for additional information.
  - D. To reduce the need for additional audio narration.
41. Which action is permitted under fair use in educational settings?
- A. Reproducing an entire book for classroom use
  - B. Using copyrighted music in a student film project
  - C. Downloading and distributing a copyrighted article without permission
  - D. Creating a parody of a copyrighted song
42. What does copyright law protect?
- A. Ideas and concepts only
  - B. The physical expression of an idea, such as a manuscript
  - C. Facts and public information
  - D. Methods of operation
43. When does the copyright on a work created in 1990 expire if the author did not register the copyright?
- A. 50 years after the author's death
  - B. 70 years after the author's death
  - C. 120 years after creation if created as part of employment
  - D. It is in the public domain immediately
44. What is considered a derivative work?
- A. A new work based entirely on original research
  - B. A novel translated into another language
  - C. A summary of a copyrighted work
  - D. An independent creation inspired by a genre



45. Under which circumstance can you use a copyrighted work without the author's permission?
- A. When the work is older than 50 years
  - B. When the work is used for a non-profit purpose
  - C. When using the work for criticism, comment, news reporting, teaching, scholarship, or research
  - D. When the author cannot be contacted
46. What defines a work made for hire in the context of copyright law?
- A. A work created by an employee within the scope of their employment
  - B. Any work commissioned by a company regardless of the creator's employment status
  - C. A work created by an independent contractor for personal use
  - D. A work that is purchased by another party after it is created
47. How does copyright law apply to public domain works?
- A. They can be used without restrictions or the need to pay royalties
  - B. They are protected for 20 years after falling into the public domain
  - C. They cannot be used for commercial purposes
  - D. They require a fee to be paid to the copyright office
48. Which statement best describes the Berne Convention?
- A. It requires all member countries to recognize copyrights granted by other member countries
  - B. It sets a fixed term for copyright worldwide
  - C. It establishes a worldwide copyright registry
  - D. It mandates that all copyrighted works be registered to receive protection
49. What is the primary purpose of a copyright notice?
- A. To inform the public that the work is protected by copyright
  - B. To register the work with the copyright office
  - C. To mark the work as pending copyright protection
  - D. To indicate that the work is in the public domain
50. Which of the following is true about Creative Commons licenses?
- A. They allow works to be used without any restrictions
  - B. They are a form of public domain
  - C. They provide a way for authors to grant certain usages of their works while retaining other rights
  - D. They negate any existing copyrights