Perfect! Let's now move to the **final topic group**:

□ Topic Group 7: HTML5, Canvas, Forms, Multimedia, CSS3, Responsive Design

Includes from syllabus:

- HTML5: `<canvas>`, forms, video/audio, new input types, attributes, APIs (local storage, geolocation, drag-drop)
- CSS3: transitions, animations, gradients, media queries, flexible layouts

---

✅ Exam-Style MCQs (40 Questions)

◆ HTML5 Canvas & Multimedia

1. Which tag is used to draw graphics in HTML5?
   - a) `<graphic>`
   - b) `<canvas>` ✅
   - c) `<svg>`
   - d) `<img>`
2. To draw on a `<canvas>`, we need:
   - a) CSS
   - b) JavaScript ✅
   - c) jQuery
   - d) Bootstrap
3. What does `getContext("2d")` return?
   - a) A CSS object
   - b) 2D drawing context ✅
   - c) A form handler
   - d) HTML5 element
4. Which method draws a rectangle?
   - a) `drawRect()`
   - b) `createBox()`
   - c) `fillRect()` ✅
   - d) `makeRect()`
5. What is required to display audio on page?
   - a) `<audio>` ✅
   - b) `<sound>`
   - c) `<media>`
   - d) `<track>`

6. The attribute that starts playing video automatically:
    - a) `loop`
    - b) `autoplay` ✅
    - c) `controls`
    - d) `poster`
7. In `<video>`, the `controls` attribute:
    - a) Adds buttons ✅
    - b) Loops video
    - c) Stops video
    - d) Resizes
8. HTML5 audio supports which formats?
    - a) `.mp3`, `.ogg`, `.wav` ✅
    - b) `.exe`
    - c) `.mov`
    - d) `.mkv`
9. Canvas coordinates (0,0) start at:
    - a) Center
    - b) Bottom-left
    - c) Top-left ✅
    - d) Random point
10. Canvas content is controlled using:
    - a) Java
    - b) JS ✅
    - c) CSS
    - d) SQL

◆ **HTML5 Forms & Attributes**

11. New input type for email:

- a) `<input type="text">`
- b) `<input type="email">` ✅
- c) `<input type="mail">`
- d) `<email>`

12. What does `required` attribute do?

- a) Adds CSS
- b) Makes field mandatory ✅
- c) Converts to checkbox
- d) Loops input

13. Attribute to show default text:

- a) `default`
- b) `placeholder` ✓
- c) `text`
- d) `tooltip`

14. Which input type shows a slider?

- a) `range` ✓
- b) `slider`
- c) `scroll`
- d) `bar`

15. HTML5 form attribute to give suggestions:

- a) `helper`
- b) `autocomplete` ✓
- c) `tooltip`
- d) `suggest`

16. `<datalist>` is used for:

- a) Display list of input suggestions ✓
- b) Validate form
- c) Animate input
- d) Add colors

17. Attribute to allow multiple file uploads:

- a) `files`
- b) `multifile`
- c) `multiple` ✓
- d) `many`

18. Which of the following is NOT a new HTML5 input type?

- a) `date`
- b) `time`
- c) `week`
- d) `colorpicker` ✓

19. Which attribute turns off auto-complete?

- a) `autocomplete="off"` ✓
- b) `autosave="no"`
- c) `inputmode="stop"`

- d) `disable="true"`

20. Attribute to match a regular expression:

- a) `match`
- b) `check`
- c) `pattern` ✅
- d) `regex`

◆ HTML5 APIs: Geolocation, Storage, Drag & Drop

21. Local storage stores:

- a) Server data
- b) User data in browser ✅
- c) CSS
- d) Cookies only

22. Which API gives user's current location?

- a) `HTML API`
- b) `window.location`
- c) `Geolocation API` ✅
- d) `URL API`

23. Method to get position in geolocation:

- a) `getPosition()`
- b) `location.get()`
- c) `navigator.geolocation.getCurrentPosition()` ✅
- d) `geo.getCurrent()`

24. Local storage data is stored:

- a) Temporarily
- b) In RAM
- c) Without expiration ✅
- d) On server

25. To store data in localStorage:

```
localStorage.setItem("key", "value");
```

- a) true ✅
- b) false

26. To delete localStorage data:

- a) `localStorage.clear()` ✅
- b) `delete localStorage`
- c) `localStorage.destroy()`
- d) `resetStorage()`

27. Which HTML5 API supports drag-and-drop?

- a) WebSockets
- b) DragDrop API ✅
- c) File API
- d) Canvas

28. In drag-and-drop, `ondrop` occurs:

- a) When dragging starts
- b) When item is dropped ✅
- c) When dragging ends
- d) When clicked

29. What event allows drag start?

- a) `ondragstart` ✅
- b) `onstart`
- c) `ondragend`
- d) `draggo`

30. Which method removes item from localStorage?

- a) `remove()`
- b) `removeItem()` ✅
- c) `deleteData()`
- d) `clear()`

🌈 CSS3 Effects, Transitions, Media Queries

31. CSS3 transition changes:

- a) Text only

- b) Styles smoothly ✓
- c) HTML tags
- d) Background color only

32. To add transition on hover:

```
div:hover {
  transition: all 0.3s;
}
```

- a) true ✓
- b) false

33. `@media` rule is used for:

- a) AJAX
- b) Forms
- c) Responsive design ✓
- d) Font color

34. CSS3 animation needs:

- a) `@motion`
- b) `@keyframes` ✓
- c) `@animate`
- d) `@steps`

35. CSS3 `transform: rotate(45deg);` does:

- a) Zoom element
- b) Rotate element ✓
- c) Skew element
- d) Flip horizontally

36. `transition-delay` sets:

- a) Speed
- b) Duration
- c) Wait time before animation ✓
- d) Opacity

37. A gradient in CSS3 can be:

- a) Linear ✓
- b) Square
- c) Hex

- d) HTML-based

38. Which is valid media query?

- a) `@media only screen and (max-width: 600px)` ✅
- b) `media-query: max 600`
- c) `screen@media(600)`
- d) `@responsive(600px)`

39. CSS3 transitions work on:

- a) Only text
- b) JS animations
- c) Any numeric CSS value ✅
- d) Audio only

40. Which CSS property animates size changes?

- a) `display`
- b) `transition` ✅
- c) `position`
- d) `z-index`

🧠 Short Questions (3 or 5 Marks)

1. **Write HTML5 code for an audio player with controls.**
2. **How is `localStorage` different from cookies?**
3. **Create a `<canvas>` and draw a filled rectangle using JS.**
4. **What is a media query? Give one example.**
5. **List and explain any three HTML5 form input types.**

🔍 Concept Traps & Smart Reminders

🔍 Concept	⚠️ Exam Tip
`<canvas>`	Must use `getContext("2d")` in JS
HTML5 input types	Learn `range`, `color`, `email`, `date`, `tel`
LocalStorage	No expiration unless manually cleared
Transitions vs Animations	Transition = on trigger; Animation = auto run
Media Queries	Very frequently tested, memorize syntax

🔍 Concept	⚠️ Exam Tip
Drag & Drop	Remember `ondragstart`, `ondrop`, `ondragover`

🎉 **You're all done with the final group!**
Let me know if you want:

- A **PDF copy** of all MCQs & short Qs for print
- A **daily revision plan**
- Extra **mock test paper**

I'm ready to help with whatever you need next!