Perfect! Let's move on to:

□ Topic Group 5: jQuery Events, Effects, and DOM Traversal

Covers:

- **jQuery Event Handling:** `.on()`, `.click()`, `.dblclick()`, `.hover()`, **etc.**
- **Event methods:** `.blur()`, `.focus()`, `.submit()`, **etc.**
- **Effects:** `.hide()`, `.show()`, `.fadeIn()`, `.slideToggle()`, `.stop()`
- **Traversing the DOM:** `.parent()`, `.children()`, `.find()`, `.siblings()`, **etc.**

✅ Exam-Style MCQs (40 Questions)

📌 jQuery Events

1. **Which method attaches a click event in jQuery?**
   - **a)** `.click()` ✅
   - **b)** `.press()`
   - **c)** `.select()`
   - **d)** `.input()`
2. **The `.on()` method is used to:**
   - **a) Trigger animations**
   - **b) Attach event handlers** ✅
   - **c) Link CSS**
   - **d) Validate forms**
3. **What does `.dblclick()` do?**
   - **a) Click once**
   - **b) Double the text**
   - **c) Trigger on double click** ✅
   - **d) Zoom in**
4. **Which method is used to trigger mouse hover?**
   - **a)** `.click()`
   - **b)** `.hover()` ✅
   - **c)** `.toggle()`
   - **d)** `.press()`
5. **Which event is triggered when an input field loses focus?**
   - **a)** `.blur()` ✅

- **b)** `.focus()`
- **c)** `.submit()`
- **d)** `.mouseleave()`

6. **What does the `submit()` method do?**
   - **a) Sends form via AJAX**
   - **b) Triggers when form is submitted** ✅
   - **c) Validates only**
   - **d) Restarts form**
7. **Which method removes a bound event handler?**
   - **a)** `.off()` ✅
   - **b)** `.unBind()`
   - **c)** `.kill()`
   - **d)** `.clear()`
8. **Which event occurs when a user changes a form input?**
   - **a)** `.blur()`
   - **b)** `.change()` ✅
   - **c)** `.hover()`
   - **d)** `.enter()`
9. **The `.focus()` method is used:**
   - **a) To zoom image**
   - **b) When input gains focus** ✅
   - **c) To blur image**
   - **d) For output printing**
10. **What is a better alternative to multiple event handlers?**
    - **a)** `.hover()`
    - **b)** `.on()` ✅
    - **c)** `.all()`
    - **d)** `.each()`

💡 jQuery Effects

11. **What does `.hide()` do?**
    - **a) Removes element**
    - **b) Hides element from DOM**
    - **c) Hides element with animation** ✅
    - **d) Deactivates event**
12. **`.fadeIn()` is used to:**
    - **a) Make element invisible**
    - **b) Show element with fading** ✅
    - **c) Delete an element**
    - **d) Slide an element**
13. **`.slideToggle()` performs:**
    - **a) Toggle CSS**

- **b) Slide up/down toggle ✅**
- **c) Toggle width**
- **d) No animation**

14. What is the default speed of jQuery effects?

- **a)** `fast`
- **b)** `slow`
- **c)** `400ms` ✅
- **d)** `800ms`

15. Which method stops an animation mid-way?

- **a)** `.end()`
- **b)** `.pause()`
- **c)** `.stop()` ✅
- **d)** `.break()`

16. How do you fade out an element in jQuery?

- **a)** `.disappear()`
- **b)** `.fade()`
- **c)** `.fadeOut()` ✅
- **d)** `.hideOut()`

17. What does `.toggle()` do?

- **a) Removes element**
- **b) Toggles visibility ✅**
- **c) Runs an AJAX call**
- **d) Checks element position**

18. What does this do?

```
19.  $("#btn").click(function(){
20.    $("p").hide();
21.  });
```

- **a) Hides all buttons**
- **b) Hides all paragraphs ✅**
- **c) Hides button only**
- **d) Hides nothing**

22. Which method is used to animate numeric CSS properties?

- **a)** `.slide()`
- **b)** `.move()`
- **c)** `.animate()` ✅
- **d)** `.toggle()`

23. What is returned by `.fadeIn()`?

- **a) A boolean**
- **b) A number**
- **c) The jQuery object ✅**
- **d) Nothing**

🌳 jQuery DOM Traversal

21. `.parent()` returns:

- **a) All parent elements**
- **b) Only direct parent ✅**
- **c) All siblings**
- **d) All ancestors**

22. `.parents()` returns:

- **a) All direct children**
- **b) All sibling elements**
- **c) All ancestors ✅**
- **d) Only root**

23. `.parentsUntil()` returns:

- **a) All parents**
- **b) Ancestors until a match ✅**
- **c) Siblings**
- **d) Children only**

24. `.children()` returns:

- **a) Only `<p>` elements**
- **b) All child elements ✅**
- **c) Grandchildren only**
- **d) Parent nodes**

25. `.find("p")` does what?

- **a) Finds a parent**
- **b) Finds all `<p>` descendants ✅**
- **c) Finds sibling `<p>`**
- **d) None**

26. What does `.next()` return?

- **a) Next sibling ✅**
- **b) Next parent**
- **c) Next child**
- **d) All next elements**

27. What does `.siblings()` return?

- **a) Parent**

- **b) Direct children**
- **c) All siblings ✅**
- **d) None**

28. What does `.first()` do?

- **a) Adds first child**
- **b) Selects the first matched element ✅**
- **c) Gets the last element**
- **d) Clears the list**

29. Which method selects a previous sibling?

- **a) `.back()`**
- **b) `.prev()` ✅**
- **c) `.before()`**
- **d) `.return()`**

30. Which method selects all elements between a selector range?

- **a) `.all()`**
- **b) `.nextUntil()` ✅**
- **c) `.range()`**
- **d) `.between()`**

🔄 Mixed Logic & Conceptual

31. jQuery's DOM traversal allows:

- **a) Animation**
- **b) Navigating elements ✅**
- **c) Deleting memory**
- **d) Redirecting pages**

32. Output of:

```
$("li").first().text();
```

- **a) All items**
- **b) First `<li>`'s text ✅**
- **c) Last item**
- **d) Error**

33. What does `$(this)` refer to in event?

- **a) Document**
- **b) Parent**
- **c) Current element ✅**
- **d) ID of clicked element**

34. What happens if `.stop()` is not used?

- **a) Animation speeds up**
- **b) Animations queue up ✅**
- **c) Error**
- **d) Nothing**

35. What does this code do?

```
$("div").hover(
  function(){ $(this).css("background", "yellow"); },
  function(){ $(this).css("background", "white"); }
);
```

- **a) Triggers click**
- **b) Changes background on hover ✅**
- **c) Slides down**
- **d) Fades in**

36. `.not()` method:

- **a) Includes everything**
- **b) Excludes matched elements ✅**
- **c) Toggles effect**
- **d) Deletes children**

37. What is a common mistake in using `.click()`?

- **a) Attaching to wrong selector ✅**
- **b) Using too many classes**
- **c) Missing `<div>`**
- **d) Declaring too late**

38. What's returned by:

```
$("ul").children().length;
```

- **a) `ul` elements**
- **b) Count of children ✅**
- **c) undefined**
- **d) All parent elements**

39. What happens if selector is incorrect?

- **a) Error shown**
- **b) Nothing happens ✅**
- **c) Alert shown**
- **d) Server crashes**

40. Chaining in jQuery means:

- **a) Attaching data**
- **b) Calling multiple methods on same selector ✅**
- **c) Using arrays**
- **d) Looping functions**

🔹 Short Questions (3 or 5 Marks)

1. **Differentiate between `.on()` and `.click()` with example.**
2. **Write jQuery code to hide all paragraphs on button click.**
3. **Explain the use of `.parent()`, `.children()`, and `.siblings()` with code.**
4. **What is event bubbling? How does `.stopPropagation()` help?**
5. **Write a function to fade in a hidden `<div>` on mouse hover.**

🔹 Concept Tips & Exam Traps

🔍 Concept	💥 Exam Trick
`.click()` vs `.on()`	`.on()` is better for dynamically created elements
DOM Traversal	`.parent()` = one level; `.parents()` = all ancestors
Effects	Use correct names: `.fadeIn()`, `.slideToggle()`
Event Handling	Use `preventDefault()` in form submission
`$(this)`	Refers to current clicked element in most event handlers

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Next up:

🔹 Topic Group 6: XML and JSON
Let me know when to continue — it'll include 40 MCQs, short questions, and traps like XML syntax rules, DTD, JSON formatting, and parsing.