PRACTICE EXAM 16: CTS-D SIMULATION (110 QUESTIONS)

Time Limit: 180 minutes | Passing Score: 70%

1. At a kickoff meeting, the client says "Just give us the same system as our other building." The designer's best response is:

A. Agree and replicate the previous design

B. Request the previous design files and copy them

C. Conduct a new needs assessment — different buildings have different requirements

D. Decline the project

2. The architect asks "How much power does AV need?" during schematic design. The proper deliverable is:

A. AV power schedule with circuits, voltage, amperage, and receptacle types per location

B. Rough verbal estimate

C. Equipment list only

D. Manufacturer brochures

3. A facility manager says "We never use the video conferencing — it's too complicated." This feedback indicates:

A. Video conferencing is unnecessary

B. Equipment is defective

C. Network is inadequate

D. Control system user experience needs simplification

4. The IT director says "No AV devices on our network." The design impact is:

A. Use consumer Wi-Fi

B. Dedicated AV network infrastructure separate from corporate LAN

C. Defer to integrator

D. Ignore IT policy

5. During a design review, the interior designer says "I don't want to see any speakers." The coordination response is:

A. Eliminate speakers from the design

B. Use headphones instead

C. Specify concealed speakers behind acoustically transparent ceiling or wall finishes

D. Reduce speaker count

6. The mechanical engineer says "I only have 5,000 BTU/hr for your equipment room." The designer's AV load is 8,000 BTU/hr. The response is:

A. Provide documented heat load showing 8,000 BTU/hr and request HVAC capacity increase

B. Accept the 5,000 BTU/hr limitation

C. Reduce equipment until load fits

D. Add portable cooling

7. A client says "We need this room to work for everything — meetings, training, town halls, and parties." The design approach is:

A. Design for meetings only

B. Design for the largest event only

C. Decline the project

D. Multi-mode design with preset scenes for each use case

8. The electrical engineer asks "Where do you need isolated ground receptacles?" The proper response is:

A. General equipment locations

B. AV infrastructure drawing showing exact locations, quantities, and circuit designations per room

C. Verbal list of rooms

D. Manufacturer catalog

9. During an OAC meeting, the GC reports AV rough-in is 2 weeks behind. The designer's response is:

A. Accept the delay

B. Defer to integrator

C. Identify AV-specific schedule risks and propose coordination recovery actions

D. Request contract extension

10. A client says "Our CEO hates technology — make it invisible." The design priority becomes:

A. Concealed equipment, architectural integration, and one-touch automated operation

B. Eliminate AV entirely

C. Consumer-grade equipment

D. Minimal technology approach

11. The structural engineer says "I can't support 300 pounds at that ceiling location." The coordination response is:

A. Reduce display size

B. Cancel the display

C. Find alternative location

D. Identify alternative mounting location with structural capacity and verify AV viewing geometry compliance

12. A client asks "Why can't we just use Zoom on a laptop?" for a 30-person conference room. The professional response is:

A. Agree — laptop is adequate

B. Explain that room-scale AV provides camera coverage, microphone pickup, and display visibility that laptops cannot deliver for 30 participants

C. Refuse to discuss alternatives

D. Specify the most expensive system

13. During commissioning, the integrator says "We tested it and it works." The designer's response is:

A. Accept the integrator's statement

B. Request verbal confirmation

C. Require documented AVSPV verification with measured values for each test item

D. Defer to owner

14. A healthcare client says "We need video conferencing but I'm not sure about HIPAA." The designer's responsibility is:

A. Proactively identify HIPAA implications and specify compliant AV security requirements

B. Ignore HIPAA — it's IT's responsibility

C. Defer to legal counsel only

D. Use consumer platforms

15. At a coordination meeting, the fire protection engineer says "Your projector conflicts with my sprinkler." The resolution path is:

A. AV takes precedence

B. Fire protection takes precedence without discussion

C. Cancel the projector

D. Coordination meeting with GC, fire protection, and AV to find mutual solution

16. A client says "Our budget was cut by 30%. What do we sacrifice?" The professional approach is:

A. Reduce everything proportionally

B. Prioritize core functionality and identify specific scope reductions with client input

C. Maintain full scope and reduce quality

D. Decline to participate in value engineering

17. The lighting designer proposes 3000 K warm lighting for the video conference room. The AV designer's response is:

A. Recommend 4000–5000 K tunable white with CRI 90+ for camera-quality video performance

B. Accept 3000 K without discussion

C. Defer to lighting designer

D. Specify 6500 K only

18. A client says "We want to stream our events to 10,000 viewers." The infrastructure implication the designer must communicate is:

A. Simple webcam is adequate

B. Minimal network impact

C. Professional streaming infrastructure including encoding, CDN, bandwidth, and redundancy

D. Consumer streaming platform only

19. During a punchlist walk-through, the owner says "This display is too high." The designer checks the specification — it matches the dimensioned elevation. The response is:

A. Accept the owner's preference

B. Offer to adjust at owner's cost

C. Ignore the complaint

D. Document that installation matches specification and discuss whether a design change is requested

20. The acoustical consultant says "This room needs variable acoustics." The AV designer's coordination response is:

A. Ignore the recommendation

B. Evaluate how variable acoustics affect AV coverage, intelligibility, and system performance

C. Accept without review

D. Override with loudspeaker changes

21. A client asks "Can you guarantee this system will last 10 years?" The honest professional response is:

A. Design infrastructure for longevity while acknowledging that technology components have 5-7 year refresh cycles

B. Guarantee 10 years

C. Refuse to discuss lifecycle

D. Specify the most expensive equipment

22. The GC says "We need your conduit locations by Friday." The AV deliverable is:

A. Verbal description

B. Email list

C. AV infrastructure drawings showing pathway locations coordinated with electrical and architectural plans

D. Rough sketch

23. A client says "Our last AV system was a disaster — the integrator disappeared after installation." The design safeguard is:

A. Hope for better results

B. Specify contractor qualifications, warranty terms, training requirements, and closeout documentation

C. Choose the cheapest bidder

D. Skip warranty requirements

24. During design development, the client adds 6 rooms to the project scope. The designer's first action is:

A. Start designing immediately

B. Request budget confirmation

C. Add equipment to existing specification

D. Assess impact on infrastructure, budget, schedule, and issue formal scope change documentation

25. A client says "We don't need training — our people are tech-savvy." The professional response is:

A. Specify tiered training matching user roles — even tech-savvy users need system-specific orientation

B. Skip training entirely

C. Provide user manual only

D. Agree with client

26. The security consultant says "We need cameras in the conference rooms." The AV coordination concern is:

A. No AV impact

B. Cameras are security-only

C. Coordinate camera placement, network sharing, and pathway requirements with security design

D. Decline involvement

27. A client asks "Why is AV so expensive?" The professional response is:

A. Apologize for the cost

B. Present value breakdown showing infrastructure investment, system capability, and lifecycle cost comparison

C. Reduce the proposal

D. Blame manufacturers

28. During construction, the integrator says "The specified product is discontinued." The formal process is:

A. Accept any alternative

B. Integrator selects replacement

C. Halt work indefinitely

D. Submit formal substitution request with performance comparison for designer review

29. A client says "We want the latest technology — what's new?" The designer's response prioritizes:

A. Newest products regardless of maturity

B. Beta-release equipment

C. Proven technology matching the client's use cases with appropriate innovation where reliable

D. Consumer trends

30. The owner says "The integrator wants more money for coordination." The designer's evaluation is:

A. Approve additional payment automatically

B. Reject without review

C. Accept at face value

D. Review against original scope and change orders — undocumented work is not payable

31. A facility manager says "The boardroom system goes down every Monday morning." The investigation priority is:

A. Replace the system

B. Check user behavior

C. Contact manufacturer

D. Investigate scheduled IT maintenance, power cycling, or automated processes affecting AV

32. A client says "We need this installed in 4 weeks." The project scope is typically 12 weeks. The response is:

A. Agree to 4 weeks

B. Document schedule risk, identify fast-track options, and communicate realistic timeline with trade-offs

C. Decline the project

D. Skip commissioning to save time

33. During a design review, the architect says "Your rack room is too big — I need that space." The negotiation approach is:

A. Accept reduced space

B. Eliminate the rack room

C. Present minimum rack room requirements with equipment count, ventilation, and service access justification

D. Oversize the request

34. A client says "Just make it wireless — no cables anywhere." The professional response is:

A. Specify hybrid wired/wireless explaining reliability trade-offs of wireless-only approach

B. Agree to all-wireless

C. Refuse wireless entirely

D. Defer to IT

35. The owner says "I want to approve every equipment selection personally." The design process impact is:

A. Skip owner involvement

B. Ignore the request

C. Proceed without approval

D. Build owner approval milestones into the design schedule for each selection phase

36. A client says "Our competitor has a better AV system — match it." The professional approach is:

A. Copy the competitor's system

B. Identify the client's actual use cases and design a system that serves their specific operational needs

C. Exceed the competitor's budget

D. Decline to compare

37. During construction administration, the integrator says "We can't reach the designer for RFI responses." The process improvement is:

A. Integrator should wait

B. RFIs are optional

C. Establish documented RFI response timeline and communication protocol

D. Owner handles all RFIs

38. A client says "We're planning a major expansion in 3 years." The infrastructure design response is:

A. Size infrastructure for current needs plus documented growth capacity for planned expansion

B. Design only for current needs

C. Design for maximum possible expansion

D. Defer infrastructure planning

39. The IT director says "AV-over-IP is too risky for our network." The designer's approach is:

A. Abandon AV-over-IP

B. Ignore IT concerns

C. Use consumer equipment instead

D. Address specific concerns with network architecture showing VLAN isolation, QoS, and bandwidth analysis

E.

40. A client says "The touch panel is confusing — there are too many buttons." The user experience lesson is:

A. Add more buttons for completeness

B. Simplify to preset scenarios with minimal user decisions per specified use cases

C. Remove the touch panel

D. Provide more training

41. During an OAC meeting, the owner asks "When will AV be ready?" The designer's response references:

A. Integrator's verbal estimate

B. General guess

C. AV commissioning milestone integrated into the construction schedule

D. Equipment delivery date only

42. A client says "We hired a consultant who said we only need 4 speakers for this 3,000 sq ft room." The correction approach is:

A. Present ACU calculations showing the actual speaker count required for Standard coverage

B. Agree with the consultant

C. Add 2 more speakers as compromise

D. Defer to the previous consultant

43. A client asks "What happens if the system breaks at 2 AM?" The design consideration is:

A. Systems don't break at night

B. Call the integrator during business hours

C. No after-hours plan needed

D. Specify appropriate service level agreement with response times matching operational criticality

44. The owner says "I don't understand these drawings." The designer's communication improvement is:

A. Simplify presentation with 3D renderings, use-case descriptions, and non-technical narrative

B. Provide more technical drawings

C. Skip owner review

D. Defer to integrator

45. A client says "We had an incident where someone recorded a confidential meeting." The design safeguard is:

A. Disable all recording

B. Post warning signs only

C. Add confidential room signage

D. Specify recording controls, access restrictions, and physical disconnect capability for sensitive spaces

46. The GC says "Your AV integrator is holding up the ceiling — they haven't installed speakers yet." The coordination response is:

A. Blame the integrator

B. Investigate the installation delay — coordinate between GC schedule and integrator access for resolution

C. Accept the delay

D. Remove speakers from scope

47. A client says "Our employees work from home 3 days a week." The design implication is:

A. Every meeting space requires hybrid capability as core infrastructure

B. No AV needed

C. Reduce AV investment

D. Design for in-person only

48. During a post-occupancy visit, the client says "Nobody uses the complicated conference rooms — they book the simple ones." The lesson is:

A. Add more features to simple rooms

B. Complex rooms need better training

C. User experience drives adoption — simpler operation produces higher utilization

D. Usage patterns don't matter

49. A client says "We need AV in our new building but construction starts next month." The timeline concern is:

A. Design can happen during construction

B. Start equipment selection immediately

C. No concern with timeline

D. AV design must begin immediately to coordinate infrastructure before construction locks pathways

50. The fire marshal says "Your cable installation above the ceiling needs plenum-rated cable." The specification response is:

A. Verify all above-ceiling cables are specified as CMP plenum-rated per NEC requirements

B. Challenge the fire marshal

C. Use standard cable with conduit

D. Accept the citation

51. A client says "We want the same experience in every room — don't make me learn different systems." The design approach is:

A. Identical equipment in every room

B. Standardized user experience with consistent interface across rooms regardless of underlying equipment

C. Different systems per room

D. Consumer equipment everywhere

52. During construction, the integrator discovers the electrical contractor installed wrong receptacle types. The coordination is:

A. Accept wrong receptacles

B. Integrator adapts

C. Not an AV concern

D. Submit RFI documenting the discrepancy for designer direction and electrical correction

53. A client says "We need the system to work during a power outage." The design specification is:

A. Systems shut down during outage

B. Battery backup alone

C. UPS with appropriate runtime sized to system criticality and generator coordination

D. Portable generators

54. The owner says "The integrator is 3 weeks behind schedule." The designer's role is:

A. Evaluate schedule impact on AV milestones and coordinate recovery plan in OAC meeting

B. Not the designer's responsibility

C. Accept the delay

D. Penalize the integrator directly

55. A client says "We want to show 4 different video sources on one screen simultaneously." The technology requirement is:

A. Four separate displays

B. Multi-window video processor capable of simultaneous source display on single screen

C. Software picture-in-picture only

D. Not technically possible

56. The acoustical consultant says "RT60 is 1.8 seconds — this room needs treatment." The AV coordination is:

A. AV is unaffected

B. No action needed

C. Accept the RT60

D. Coordinate treatment specification that reduces RT60 while maintaining AV coverage requirements

57. A client says "Our last designer over-specified everything and wasted our budget." The trust-building approach is:

A. Under-specify to save money

B. Match competitor pricing

C. Present design rationale for every specification choice tied to documented use-case requirements

D. Agree that previous designer was wrong

58. During a value engineering session, the client asks "What can we cut without losing functionality?" The designer's approach is:

A. Identify equipment substitutions, scope reductions, and phasing options with documented impact on each

B. Cut everything proportionally

C. Refuse to value engineer

D. Reduce quality across the board

59. A client says "We need AV in 50 rooms but only have budget for 30." The phasing approach is:

A. Design all 50 rooms at reduced quality

B. Design 30 rooms with infrastructure provisions for future 20-room expansion

C. Design 50 rooms and exceed budget

D. Decline the project

60. The IT director asks "How much bandwidth does your AV system need?" The proper deliverable is:

A. Rough estimate

B. Verbal ballpark

C. Equipment list

D. Detailed bandwidth analysis per room showing stream counts, resolution, and aggregate network impact

61. A client says "The audio sounds terrible in the big room." The investigation starts with:

A. Replace all speakers

B. Buy new amplifiers

C. Measure SPL, coverage uniformity, RT60, and STI to identify specific acoustic deficiencies

D. Increase volume

62. A client says "We want to control AV from our phones." The specification impact is:

A. Mobile device control application integrated with control system supporting iOS and Android

B. Consumer Bluetooth control

C. No mobile control available

D. Separate app per device

63. During closeout, the integrator says "We'll deliver as-builts next month." The contract requires them at substantial completion. The response is:

A. Accept the delay

B. Extend the deadline

C. As-builts are optional

D. Require as-built delivery per contract before substantial completion acceptance

64. A client says "We need the room dark for presentations but bright for video calls." The lighting design implication is:

A. Fixed lighting for one mode

B. Dual-mode lighting with presentation dimming and video conferencing brightness controllable through AV scene presets

C. No lighting specification needed

D. Separate rooms for each use

65. The owner says "I don't want the integrator back in my building after turnover." The closeout specification must include:

A. Verbal handover only

B. Equipment list delivery

C. Complete documentation, training, credential transfer, and spare parts enabling owner-independent operation

D. Manufacturer support only

66. A client says "We're a law firm — everything in our conference rooms is confidential." The security design priority is:

A. Encrypted transport, isolated network, recording controls, and physical security of AV infrastructure

B. Standard office security

C. Consumer equipment

D. Cloud-based recording

67. A client asks "How long until this system is obsolete?" The professional lifecycle guidance is:

A. Infrastructure lasts 15-20 years while technology components typically refresh every 5-7 years

B. Systems never become obsolete

C. Replace everything in 3 years

D. No lifecycle planning needed

68. During a design review, the owner says "I love the design but it's $200K over budget." The professional response is:

A. Reduce everything without discussion

B. Accept the overrun

C. Present prioritized options showing specific scope reductions, phasing alternatives, and their impact on functionality

D. Decline to modify

69. A client says "Our facilities team has no AV expertise." The operational design consideration is:

A. Complex systems build expertise

B. Training alone resolves this

C. No impact on design

D. Specify remote monitoring, managed services, and simplified maintenance procedures

70. The security director says "We need to disable all cameras and microphones for certain meetings." The control system design must include:

A. Software-only disable

B. Physical hardware disconnect switches for cameras and microphones in sensitive spaces

C. No disable capability

D. Verbal procedure only

71. A client says "We hosted a 500-person event and the PA was inadequate." The investigation starts with:

A. Coverage analysis comparing installed SPL, coverage uniformity, and STI against 500-person event requirements

B. Replace all speakers

C. Add subwoofers

D. Increase amplifier power only

72. During design development, the client adds outdoor AV to the scope. The first specification requirement is:

A. Standard indoor equipment

B. Consumer speakers

C. IP-rated weather-resistant equipment with outdoor coverage patterns

D. Portable equipment only

73. A client says "We need to present evidence on screens in our courtroom." The ADA coordination requires:

A. Standard display placement

B. Large display only

C. Audio enhancement only

D. Accessible display positioning visible from all participant positions including wheelchair locations

74. The owner asks "Who maintains the system after warranty?" The operational planning response is:

A. Specify service contract options with response times and SLAs during design phase

B. Manufacturer handles everything

C. No maintenance needed

D. Integrator maintains automatically

75. A client says "We want natural daylight in our conference rooms." The AV implication is:

A. No impact on AV design

B. Specify motorized shading coordinated with AV scenes for display visibility control

C. Eliminate projection

D. Accept reduced image quality

76. During a pre-bid conference, a bidder asks "Can we substitute the specified DSP with our preferred brand?" The response is:

A. Accept any substitution

B. Allow during construction

C. Bidder decides

D. Follow specification substitution procedures — submit request with performance comparison 14 days before bid

77. A client says "The remote participants can hear echo during calls." The technical investigation starts with:

A. Replace microphones

B. Increase volume

C. Verify AEC configuration, tail length, and reference signal routing

D. Reduce microphone count

78. The fire marshal issues a citation for non-rated cables above the ceiling. The immediate response is:

A. Replace cited cables with CMP plenum-rated cables per NEC requirements

B. Challenge the citation

C. Accept the fine

D. Add conduit around existing cables

79. A client says "We want to track room utilization data." The AV design integration is:

A. Manual headcount

B. Occupancy sensors, scheduling system integration, and analytics dashboard

C. No AV involvement

D. Security camera counting

80. During construction, water damage affects installed AV cabling. The coordination response is:

A. Accept damaged cables

B. Ignore the damage

C. Test only affected areas

D. Document damage, test all affected cables, and replace any failing verification per specification

81. A client says "Our board members are 60-75 years old." The design consideration is:

A. Standard interface

B. Consumer simplicity

C. Larger display text, hearing assistance, simplified controls, and higher-contrast interface design

D. No special consideration

82. The owner says "The integrator submitted a bill for work we didn't approve." The designer's recommendation is:

A. Approve for goodwill

B. Pay partial amount

C. Accept the invoice

D. Review against documented change orders — undocumented work is not payable

83. A client says "We need the same system our competitor has." The professional response is:

A. Copy the competitor

B. Design for the client's specific use cases — competitor systems serve different operational needs

C. Exceed competitor spending

D. Decline to discuss

84. During post-occupancy, the client reports that one room is used 5x more than identical adjacent rooms. The design insight is:

A. Identical rooms should have equal usage

B. Training is needed

C. No significance

D. Investigate what differentiates the popular room — location, booking, or undocumented user preference

85. A client says "We're expanding into telemedicine." The first design coordination is:

A. Standard video conferencing

B. Consumer equipment

C. HIPAA compliance assessment driving encrypted transport, access controls, and clinical workflow integration

D. IT handles telemedicine

86. The mechanical engineer says "Your equipment room needs a floor drain." The coordination response is:

A. Confirm floor drain requirement and coordinate location with MEP for condensate and cooling management

B. Floor drains are unnecessary

C. Not an AV concern

D. Reject the recommendation

87. A client says "We want the system to turn on when someone walks in." The control specification is:

A. Always-on system

B. Occupancy-sensing activation with automatic system wake-up and default scene configuration

C. Manual-only operation

D. Scheduled operation only

88. During a punchlist walk-through, the integrator disputes 8 of 20 items. The resolution approach is:

A. Accept integrator's position

B. Negotiate without reference

C. Remove disputed items

D. Reference specification sections for each disputed item — the specification is the contractual standard

89. A client asks "What's the difference between your design and a Best Buy setup?" The professional differentiator is:

A. Equipment brand

B. Higher cost

C. Engineered system designed for specific use cases with coverage calculations, code compliance, and lifecycle reliability

D. No real difference

90. The owner says "The system worked during commissioning but fails during actual meetings." The investigation focus is:

A. Environmental conditions during actual use differing from commissioning conditions

B. User error only

C. Equipment defect

D. Network failure only

91. A client says "We need AV for our new building but the architect hasn't started yet." The professional timing advice is:

A. Wait for architecture to complete

B. AV has no architectural impact

C. Start equipment selection now

D. Engage AV design during architectural programming to influence infrastructure decisions

E.

92. During a design meeting, the client's CFO asks "What's the total cost of ownership over 10 years?" The response should include:

A. Equipment cost only

B. Capital cost plus annual maintenance, energy, technology refresh, and operational staffing estimates

C. Installation cost only

D. Warranty cost only

93. A client says "Our employees complain they can't connect their laptops." The design solution addresses:

A. More HDMI cables

B. IT training

C. BYOD-enabled wireless and wired presentation with multi-platform support

D. Standardize on one laptop brand

94. The GC says "We're accelerating the schedule by 3 weeks." The AV impact assessment includes:

A. Equipment lead times, integrator mobilization, and commissioning compression with risk documentation

B. No AV impact

C. Automatic schedule adjustment

D. Equipment arrives faster

95. A client says "We want AV in 100 rooms across 5 buildings." The first design priority is:

A. Room-by-room design

B. Individual building systems

C. Consumer equipment

D. Campus infrastructure backbone, room-type standardization, and centralized management architecture

96. During closeout, the owner asks "How do we change the touch panel labels ourselves?" The deliverable ensuring this is:

A. Verbal instructions

B. Control system source code, programming documentation, and administrator training transfer

C. Manufacturer hotline number

D. Online tutorial

97. A client says "We want to reduce our carbon footprint with this AV system." The design consideration is:

A. Not an AV concern

B. Use less equipment

C. AVSEM energy management including scheduling, occupancy-sensing standby, and efficient equipment specification

D. Renewable energy only

98. The owner says "The integrator claims this punchlist item is a design error, not an installation deficiency." The investigation approach is:

A. Review the specification and design documents objectively to determine whether the issue originates in design or installation

B. Accept integrator's claim

C. Reject without investigation

D. Defer to owner

99. A client says "We need the system operational for our grand opening in 6 weeks." The schedule assessment includes:

A. Agree without evaluation

B. Skip commissioning

C. Equipment will arrive on time

D. Evaluate equipment lead times, installation duration, and commissioning against the 6-week target with documented risks

100. During a design review, an owner's representative asks "Why do we need all these cables if everything is wireless now?" The professional response is:

A. Agree and eliminate cables

B. Explain that wired infrastructure provides reliability backbone while wireless adds flexibility for specific applications

C. Cables are optional

D. Defer to IT

101. A client says "We had a flood in our AV equipment room last year." The design safeguard is:

A. Standard equipment placement

B. Consumer-grade protection

C. Elevated rack mounting, water-detection sensors, and coordination with MEP for drainage and leak prevention

D. Insurance covers flood damage

102. The owner asks "Can you attend our construction meetings?" The designer's professional role is:

A. Regular OAC meeting attendance for AV-specific coordination and issue resolution

B. Not the designer's responsibility

C. Attend only if paid extra

D. Integrator represents AV interests

103. A client says "We want every meeting recorded automatically." The compliance concern is:

A. No concern

B. Auto-recording is standard

C. Recording is integrator's responsibility

D. Privacy policy, consent notification, retention policy, and jurisdictional recording laws must be addressed

104. During construction, the AV pathway is blocked by unexpected structural steel. The coordination response is:

A. Cancel the pathway

B. Submit RFI with proposed alternative routing coordinated with structural and electrical engineers

C. Integrator routes around it

D. Accept the obstruction

105. A client says "Our janitors keep unplugging AV equipment to plug in vacuums." The design solution is:

A. Label outlets "Do not unplug"

B. Train janitorial staff

C. Dedicated AV circuits with locking receptacles or covers separate from convenience outlets

D. Accept the problem

106. The owner asks at closeout "Do we own the software licenses?" The specification should have defined:

A. License ownership transfer to owner with documented license types, renewal terms, and access credentials

B. Integrator retains licenses

C. Manufacturer owns licenses

D. No license documentation needed

107. A client says "We're renovating occupied space — the system must stay operational during construction." The design approach is:

A. Full shutdown during renovation

B. No accommodation needed

C. Temporary equipment only

D. Phased implementation maintaining operational continuity during construction

108. During post-occupancy, a client says "Rooms 3 and 7 always have audio problems but the others are fine." The diagnostic focus is:

A. Replace all DSPs

B. Compare rooms 3 and 7 against working rooms for differences in acoustic treatment, speaker placement, DSP configuration, or infrastructure

C. System-wide upgrade

D. Microphone replacement

109. A client says "We need to demonstrate our products to visiting customers." The design requirement is:

A. Multi-source switching, product demonstration AV, recording capability, and flexible presentation infrastructure

B. Standard conference setup

C. Consumer display

D. Portable equipment only

110. The owner says "Thank you — this is the best AV system we've ever had." The final professional action is:

A. Accept the compliment

B. Provide updated equipment list

C. Document lessons learned, archive project documentation, and schedule post-warranty check-in

D. No further action needed

PRACTICE EXAM 16: ANSWER KEY AND EXPLANATIONS

1. C — Conduct a new needs assessment because different buildings have different requirements. Room dimensions, ceiling heights, ambient conditions, occupancy patterns, and user workflows vary between facilities. Replicating a previous design without assessment risks mismatched AV that doesn't serve the new building's actual needs.

2. A — AV power schedule with circuits, voltage, amperage, and receptacle types per location. The electrical engineer requires specific, actionable data to design branch circuits and panel schedules. Verbal estimates or equipment lists lack the precision needed for proper electrical engineering coordination.

3. D — Control system user experience needs simplification when users avoid the system. "Too complicated" indicates the interface creates barriers rather than enabling users. This is a design-phase UX failure, not an equipment defect or network issue.

4. B — Dedicated AV network infrastructure separate from corporate LAN is required when IT policy prohibits AV devices. This is a significant infrastructure and cost impact requiring independent switches, cabling, and internet access for AV systems. Ignoring IT policy or using consumer Wi-Fi creates security violations and unreliable operation.

5. C — Concealed speakers behind acoustically transparent ceiling or wall finishes satisfy both aesthetic and audio requirements. This coordination between AV and interior design achieves invisible audio while maintaining coverage performance. Eliminating speakers or reducing count compromises the audio design.

6. A — Provide documented heat load showing 8,000 BTU/hr and request HVAC capacity increase. Data-driven coordination gives the mechanical engineer the specific information needed to resize cooling equipment. Accepting insufficient capacity guarantees equipment overheating and premature failure.

7. D — Multi-mode design with preset scenes for each use case serves all event types. Scene-based control enables one-touch transformation between meetings, training, town halls, and social events. Single-purpose design fails every use case except the one selected.

8. B — AV infrastructure drawing showing exact locations, quantities, and circuit designations per room. Isolated ground receptacles are permanent electrical installations requiring precise placement on construction documents. Verbal lists or general locations create costly errors when outlets are installed in wrong positions.

9. C — Identify AV-specific schedule risks and propose coordination recovery actions. The AV designer participates in OAC meetings as an active collaborator identifying trade-specific impacts and solutions. Accepting delays, deferring, or requesting extensions miss the professional coordination opportunity.

10. A — Concealed equipment, architectural integration, and one-touch automated operation serves technology-averse executives. The design translates "invisible technology" into professional specifications including hidden speakers, recessed displays, occupancy-sensing activation, and preset scenarios requiring zero user interaction.

11. D — Identify alternative mounting location with structural capacity and verify AV viewing geometry compliance. Structural limitations require collaborative problem-solving across disciplines. The alternative location must satisfy both structural capacity and DISCAS viewing geometry requirements simultaneously.

12. B — Room-scale AV provides camera coverage, microphone pickup, and display visibility that laptops cannot deliver for 30 participants. A laptop camera captures only nearby participants, the built-in microphone misses distant speakers, and the screen is invisible beyond the front row. Professional AV serves the entire room.

13. C — Require documented AVSPV verification with measured values for each test item. Integrator verbal assurance is not acceptance evidence. AVSPV provides the objective measurement framework that produces documented proof of specification compliance.

14. A — Proactively identify HIPAA implications and specify compliant AV security requirements. Healthcare clients may not recognize that video conferencing, recording, and display systems carry HIPAA obligations. The designer's professional responsibility includes identifying these requirements even when clients don't articulate them.

15. D — Coordination meeting with GC, fire protection, and AV to find mutual solution. Multi-trade ceiling conflicts require collaborative resolution because unilateral decisions create liability. Fire protection has code-mandated priority, but alternative solutions often exist that satisfy both trades.

16. B — Prioritize core functionality and identify specific scope reductions with client input. Professional value engineering preserves essential system capability while identifying specific, documented reductions. Proportional cuts, quality reductions, or refusal to participate don't serve the client's needs.

17. A — Recommend 4000–5000 K tunable white with CRI 90+ for camera-quality video performance. Video cameras reproduce light characteristics; warm 3000 K produces orange skin tones on camera that cannot be corrected by the codec. AV designers have professional obligation to provide technical lighting input.

18. C — Professional streaming infrastructure including encoding, CDN, bandwidth, and redundancy. Streaming to 10,000 viewers requires robust infrastructure far beyond consumer platforms.

Encoding quality, content delivery network selection, bandwidth provisioning, and redundancy planning are all essential for reliable large-scale streaming.

19. D — Document that installation matches specification and discuss whether a design change is requested. When installation conforms to dimensioned specifications, it is compliant work. If the owner wants a change, it constitutes a design modification requiring formal process, not a punchlist correction.

20. B — Evaluate how variable acoustics affect AV coverage, intelligibility, and system performance. Acoustic treatment changes the room characteristics that the AV system was designed around. The AV designer must verify that recommended treatment doesn't negatively impact coverage uniformity or create new acoustic problems.

21. A — Design infrastructure for longevity while acknowledging 5-7 year technology refresh cycles. Honest professional guidance distinguishes between durable infrastructure (conduit, pathways, structural support) and evolving technology components (displays, processors, codecs). Guaranteeing 10 years or refusing to discuss lifecycle fails the client.

22. C — AV infrastructure drawings showing pathway locations coordinated with electrical and architectural plans. Conduit locations must appear on coordinated construction documents because multiple trades share ceiling and wall cavities. Verbal descriptions, emails, or rough sketches don't convey spatial information needed to avoid conflicts.

23. B — Specify contractor qualifications, warranty terms, training requirements, and closeout documentation. Past negative experience highlights the need for contractual safeguards. Qualification requirements, warranty terms, training deliverables, and documentation requirements create accountability that prevents integrator abandonment.

24. D — Assess impact on infrastructure, budget, schedule, and issue formal scope change documentation. Adding 6 rooms affects electrical, mechanical, network, and pathway infrastructure beyond simply adding equipment. Formal scope change documentation captures all impacts and establishes budget and schedule adjustments.

25. A — Specify tiered training matching user roles regardless of perceived tech-savviness. Even technology-proficient users need system-specific orientation because each AV system has unique operating procedures. Tiered training ensures end users, technical staff, and administrators each receive appropriate depth.

26. C — Coordinate camera placement, network sharing, and pathway requirements with security design. Security and AV systems often share physical pathways, network infrastructure, and ceiling space. Early coordination prevents installation conflicts and identifies opportunities for shared infrastructure efficiency.

27. B — Present value breakdown showing infrastructure investment, system capability, and lifecycle cost comparison. Professional AV cost is justified through documented value: coverage

calculations, code compliance, reliability engineering, and lifecycle cost analysis. Apologizing, reducing, or blaming doesn't serve the professional relationship.

28. D — Submit formal substitution request with performance comparison for designer review. Discontinued products require formal documentation through the substitution process. The integrator must demonstrate that the proposed replacement meets or exceeds the original specification's performance requirements.

29. C — Proven technology matching client use cases with appropriate innovation where reliable. Professional recommendations balance client interest in innovation with the reliability that production environments require. Beta products and consumer trends don't belong in professional installations; proven technology with targeted innovation serves both goals.

30. A — Review against original scope and change orders — undocumented work is not payable. Additional coordination fees require documented authorization through change orders. Automatic approval, face-value acceptance, or rejection without review all fail the professional evaluation standard.

31. D — Investigate scheduled IT maintenance, power cycling, or automated processes affecting AV. Monday-morning failures suggest weekly automated processes (updates, restarts, backup routines) disrupting AV device operation. Systematic investigation of scheduled events identifies the root cause more efficiently than equipment replacement.

32. B — Document schedule risk, identify fast-track options, and communicate realistic timeline with trade-offs. Agreeing to an impossible timeline sets the project up for failure. Professional guidance identifies what acceleration is possible, what trade-offs exist, and what risks the compressed schedule creates.

33. C — Present minimum rack room requirements with equipment count, ventilation, and service access justification. Data-driven negotiation demonstrates that rack room sizing is based on documented requirements, not arbitrary preference. Equipment count, ventilation needs, and service clearance establish minimum dimensions.

34. A — Specify hybrid wired/wireless explaining reliability trade-offs of wireless-only approach. Professional guidance includes explaining that wireless-only systems have inherent reliability limitations. Hybrid design maximizes wireless convenience for appropriate applications while maintaining wired reliability for critical connections.

35. D — Build owner approval milestones into the design schedule for each selection phase. Accommodating owner involvement requires structured approval gates that don't delay the design timeline. Scheduled milestones for equipment selection review maintain project momentum while satisfying the owner's requirement.

36. B — Identify the client's actual use cases and design for their specific operational needs. Competitor systems serve different organizational workflows and may not match the client's actual

requirements. Professional design starts with the client's own use cases rather than reverse-engineering a competitor's solution.

37. C — Establish documented RFI response timeline and communication protocol. Communication breakdowns require process solutions, not blame. Documented response timelines, designated contacts, and escalation procedures prevent RFI bottlenecks.

38. A — Size infrastructure for current needs plus documented growth capacity for planned expansion. Known expansion plans require designed-in infrastructure capacity now because pathways, backbone, and switch capacity are expensive to retrofit. Designing only for current needs guarantees reconstruction in 3 years.

39. D — Address specific IT concerns with network architecture showing VLAN isolation, QoS, and bandwidth analysis. Technical concerns require technical responses. Demonstrating network isolation, priority handling, and bandwidth analysis addresses IT's specific risk factors rather than abandoning the technology.

40. B — Simplify to preset scenarios with minimal user decisions per specified use cases. Too many buttons indicates the interface exposes technical complexity to non-technical users. Preset scenarios reduce interaction to the minimum needed for each use case.

41. C — AV commissioning milestone integrated into the construction schedule provides the definitive timeline. Schedule answers must reference documented milestones, not verbal estimates or equipment dates. Integration with the construction schedule ensures all trades coordinate toward the same completion target.

42. A — Present ACU calculations showing the actual speaker count required for Standard coverage. Professional credibility comes from documented calculations, not opinions. ACU coverage geometry at the room's ceiling height and specified coverage angle determines the mathematically correct speaker count.

43. D — Specify appropriate service level agreement with response times matching operational criticality. After-hours failures in mission-critical facilities require documented support plans. SLA specifications during design ensure the owner has contractual service coverage matching their operational needs.

44. B — Simplify presentation with 3D renderings, use-case descriptions, and non-technical narrative. Owners are not AV professionals; they need visual representations and plain-language descriptions to provide meaningful design feedback. More technical drawings increase confusion rather than clarity.

45. D — Specify recording controls, access restrictions, and physical disconnect capability for sensitive spaces. Security-sensitive spaces require designed-in protections beyond signage. Physical disconnect switches, access-controlled recording, and audit logging provide verifiable security for confidential meetings.

46. B — Investigate the installation delay and coordinate between GC schedule and integrator access for resolution. Schedule delays require investigation of root cause — the integrator may lack site access, material delivery, or coordination clearance. Problem-solving replaces blame assignment.

47. A — Every meeting space requires hybrid capability as core infrastructure when staff works remotely 3 days weekly. Remote work patterns make video conferencing the primary meeting modality rather than an occasional feature. Hybrid infrastructure becomes foundational design requirement in every room.

48. C — User experience drives adoption — simpler operation produces higher utilization. Room utilization data directly reflects user experience quality. Complex rooms deter booking while simple rooms attract users, proving that operational simplicity is the primary adoption driver.

49. D — AV design must begin immediately to coordinate infrastructure before construction locks pathways. Conduit, structural support, electrical circuits, and HVAC capacity must be designed before walls and ceilings are built. Starting AV design after construction begins forces costly retrofits.

50. A — Verify all above-ceiling cables are specified as CMP plenum-rated per NEC requirements. Fire marshal citations require immediate specification compliance verification. Plenum-rated cables prevent toxic smoke generation during fire events in air-handling spaces.

51. B — Standardized user experience with consistent interface across rooms regardless of underlying equipment. Users care about consistent operation, not identical hardware. A standardized touch panel interface providing the same workflow in every room achieves the user's goal even when underlying equipment varies by room size or function.

52. D — Submit RFI documenting the discrepancy for designer direction and electrical correction. Wrong receptacle types require formal documentation and coordinated correction. The RFI creates the paper trail needed for proper electrical remediation.

53. C — UPS with appropriate runtime sized to system criticality and generator coordination. Power outage resilience requires UPS for immediate backup with runtime matched to system criticality. Generator coordination provides extended backup for mission-critical applications beyond UPS battery capacity.

54. A — Evaluate schedule impact on AV milestones and coordinate recovery plan in OAC meeting. The designer's professional role includes monitoring AV-specific schedule impacts and facilitating recovery coordination. Passive acceptance or direct integrator penalty fall outside the designer's proper role.

55. B — Multi-window video processor capable of simultaneous source display on single screen. Four simultaneous sources on one display require a video processor with multi-window compositing capability. Software PIP typically handles only 2 sources; four requires dedicated processing hardware.

56. D — Coordinate treatment specification that reduces RT60 while maintaining AV coverage requirements. Acoustic treatment changes the room characteristics around which the AV system was designed. The AV designer must verify that proposed treatment materials and placement don't create speaker obstructions or coverage modifications.

57. C — Present design rationale for every specification choice tied to documented use-case requirements. Trust rebuilds through transparent justification. Every specification choice should trace back to a documented requirement, demonstrating that nothing is arbitrary or over-specified.

58. A — Identify equipment substitutions, scope reductions, and phasing options with documented impact on each. Professional value engineering presents specific options with clear trade-off documentation. The client makes informed decisions about what to sacrifice based on understanding the functional impact of each reduction.

59. B — Design 30 rooms with infrastructure provisions for future 20-room expansion. Phased deployment serves both the current budget and future needs. Infrastructure backbone, switch capacity, and pathway provisions for 20 additional rooms prevent costly reconstruction when the budget allows expansion.

60. D — Detailed bandwidth analysis per room showing stream counts, resolution, and aggregate network impact. IT engineers need specific data to provision network capacity. Rough estimates or verbal ballparks don't support the precise bandwidth reservation and QoS configuration AV-over-IP requires.

61. C — Measure SPL, coverage uniformity, RT60, and STI to identify specific acoustic deficiencies. "Sounds terrible" is a symptom, not a diagnosis. Objective measurements identify whether the problem is coverage gaps, excessive reverberation, insufficient STI, or equipment failure, preventing incorrect remediation.

62. A — Mobile device control application integrated with control system supporting iOS and Android. Modern control systems support mobile device interfaces that replicate touch panel functionality. The specification must define platform support, security, and feature parity with the room's primary control interface.

63. D — Require as-built delivery per contract before substantial completion acceptance. As-built drawings are contractual closeout deliverables with a specified delivery date. Accepting delayed delivery removes the contractual leverage ensuring the integrator completes documentation.

64. B — Dual-mode lighting with presentation dimming and video conferencing brightness controllable through AV scene presets. Conflicting lighting needs for dark presentations and bright video calls require controllable lighting scenes. AV-integrated lighting presets switch between modes with a single touch.

65. C — Complete documentation, training, credential transfer, and spare parts enabling owner-independent operation. When the owner doesn't want continued integrator presence, the closeout

package must ensure complete independence. Every document, credential, and spare part needed for autonomous operation must transfer at closeout.

66. A — Encrypted transport, isolated network, recording controls, and physical security of AV infrastructure. Law firm confidentiality requires comprehensive AV security across all system components. Standard office security and consumer equipment don't meet the heightened confidentiality requirements of legal practice.

67. A — Infrastructure lasts 15-20 years while technology components typically refresh every 5-7 years. Honest lifecycle guidance distinguishes between durable infrastructure and evolving technology. This framework helps clients plan capital budgets and technology refresh cycles realistically.

68. C — Present prioritized options showing specific scope reductions, phasing alternatives, and their impact on functionality. Budget overruns require structured options rather than blanket reductions or refusal. Prioritized alternatives with documented functional impact enable informed client decisions.

69. D — Specify remote monitoring, managed services, and simplified maintenance procedures. Facilities teams without AV expertise need systems designed for non-specialist maintenance. Remote monitoring identifies problems before users notice, managed services provide expert support, and simplified procedures enable basic staff maintenance.

70. B — Physical hardware disconnect switches for cameras and microphones in sensitive spaces. Software disabling can be overridden remotely; physical disconnect switches provide verifiable, tamper-evident privacy. Occupants can visually confirm that cameras and microphones are electrically disconnected.

71. A — Coverage analysis comparing installed SPL, coverage uniformity, and STI against 500-person event requirements. PA inadequacy at large events requires measurement-based diagnosis. Comparing installed performance against the specific requirements of a 500-person event identifies whether the issue is coverage, power, intelligibility, or a combination.

72. C — IP-rated weather-resistant equipment with outdoor coverage patterns is the first outdoor specification requirement. Without environmental protection, outdoor AV equipment fails rapidly from weather exposure. IP ratings and weather-resistant construction must be specified before any performance parameters.

73. D — Accessible display positioning visible from all participant positions including wheelchair locations. ADA requires that evidence displays be visible to all courtroom participants regardless of physical ability. Display height, angle, and position must accommodate wheelchair users and other accessibility needs.

74. A — Specify service contract options with response times and SLAs during design phase. Post-warranty maintenance planning should begin during design, not after warranty expires. Service

contracts with defined response times, covered equipment, and escalation paths ensure continuous support after warranty.

75. B — Specify motorized shading coordinated with AV scenes for display visibility control. Natural daylight and display visibility are inherently in tension. Motorized shading integrated with AV scene presets provides both daylight access and display readability on demand.

76. D — Follow specification substitution procedures with performance comparison submitted 14 days before bid. Substitution procedures protect specification integrity while allowing competitive alternatives. The 14-day timeline ensures adequate evaluation before bid day.

77. C — Verify AEC configuration, tail length, and reference signal routing. Echo heard by remote participants indicates acoustic echo cancellation is inadequately configured or has insufficient processing tail length. AEC diagnosis starts with configuration verification before any hardware changes.

78. A — Replace cited cables with CMP plenum-rated cables per NEC requirements. Fire marshal citations for non-rated cables require immediate code compliance. Challenging citations, accepting fines, or adding conduit around existing cables don't resolve the fundamental code violation.

79. B — Occupancy sensors, scheduling system integration, and analytics dashboard for room utilization tracking. Utilization data requires automated measurement through occupancy sensing integrated with booking systems. Manual headcounts are unreliable; security cameras raise privacy concerns.

80. D — Document damage, test all affected cables, and replace any failing verification per specification. Water damage may cause latent cable degradation not immediately visible. Comprehensive testing of all affected cables, with replacement of any failing verification, ensures long-term reliability.

81. C — Larger display text, hearing assistance, simplified controls, and higher-contrast interface design. Board members aged 60-75 may experience age-related vision and hearing changes. Design accommodations including larger fonts, hearing loop access, and high-contrast simplified interfaces serve this demographic.

82. D — Review against documented change orders — undocumented work is not payable without authorization. Contract payment requires documented authorization through change orders. Unapproved work cannot be invoiced regardless of whether it was performed; the designer recommends accordingly.

83. B — Design for the client's specific use cases rather than replicating a competitor's system. Each organization has unique operational workflows, room configurations, and user expectations. Professional design starts with the client's documented requirements rather than reverse-engineering another organization's solution.

84. D — Investigate what differentiates the popular room to inform future design decisions. Usage disparity between identical rooms reveals hidden user preferences — potentially location, booking ease, acoustic quality, or reliability differences. This post-occupancy insight improves future designs.

85. C — HIPAA compliance assessment driving encrypted transport, access controls, and clinical workflow integration. Telemedicine expansion triggers HIPAA obligations for all video consultation systems. The compliance assessment establishes security requirements that govern all subsequent design decisions.

86. A — Confirm floor drain requirement and coordinate location with MEP for condensate and cooling management. Equipment rooms with dedicated HVAC may produce condensate requiring drainage. Coordinating the floor drain with MEP prevents water accumulation that could damage equipment.

87. B — Occupancy-sensing activation with automatic system wake-up and default scene configuration. Walk-in activation eliminates user interaction entirely for basic room operation. Occupancy sensors trigger system startup and configure a default scene, achieving the zero-touch operation the client described.

88. D — Reference specification sections for each disputed item establishing the contractual standard. The specification is the objective standard against which work is measured. Specification references remove subjectivity from disputes and establish clear compliance criteria that both parties agreed to during contracting.

89. C — Engineered system designed for specific use cases with coverage calculations, code compliance, and lifecycle reliability. Professional AV design is engineering, not retail. Coverage calculations, code compliance, acoustical treatment, and lifecycle planning create systems that consumer equipment cannot replicate.

90. A — Environmental conditions during actual use differing from commissioning conditions. Real-world meetings introduce occupancy noise, HVAC load changes, lighting variations, and network traffic that commissioning conditions didn't replicate. Investigation must compare actual operating conditions against commissioning conditions.

91. D — Engage AV design during architectural programming to influence infrastructure decisions. Early engagement enables AV infrastructure to be designed into the building rather than retrofitted. Conduit pathways, structural support, electrical capacity, and equipment room locations are difficult or impossible to add after construction begins.

92. B — Capital cost plus annual maintenance, energy, technology refresh, and operational staffing estimates. Total cost of ownership includes all costs over the system's lifecycle, not just initial capital. Maintenance contracts, energy consumption, technology refresh cycles, and staffing requirements all contribute to the 10-year cost picture.

93. C — BYOD-enabled wireless and wired presentation with multi-platform support. Laptop connectivity complaints indicate the system doesn't accommodate diverse device types. Wireless presentation supporting all platforms plus wired backup ensures any device can connect regardless of manufacturer or operating system.

94. A — Equipment lead times, integrator mobilization, and commissioning compression with risk documentation. Schedule acceleration affects AV delivery timelines that may not compress proportionally. Documented risk assessment identifies long-lead items, mobilization constraints, and commissioning time that cannot be safely shortened.

95. D — Campus infrastructure backbone, room-type standardization, and centralized management architecture. 100 rooms across 5 buildings requires enterprise-scale planning rather than room-by-room design. Backbone fiber, standardized room types, and centralized management create sustainable operations.

96. B — Control system source code, programming documentation, and administrator training transfer. Owner independence for system modifications requires source code, documentation explaining programming logic, and administrator training. Without these deliverables, every label change requires the original programmer.

97. C — AVSEM energy management including scheduling, occupancy-sensing standby, and efficient equipment specification. The AVIXA AVSEM standard provides the framework for sustainable AV design. Scheduling-based power management, occupancy sensing, and energy-efficient equipment selection directly reduce the system's carbon footprint.

98. A — Review specification and design documents objectively to determine origin of the issue. Professional integrity requires objective investigation regardless of which party is responsible. If the issue originates in design, the designer acknowledges it; if in installation, the integrator remediates it.

99. D — Evaluate equipment lead times, installation duration, and commissioning against the 6-week target with documented risks. Professional schedule assessment identifies each critical-path activity and its duration. Documented risk analysis enables the client to make informed decisions about scope reduction or schedule acceptance.

100. B — Explain that wired infrastructure provides reliability backbone while wireless adds flexibility for specific applications. Professional education helps owners understand that wired and wireless serve different reliability roles. Wired infrastructure ensures mission-critical connectivity while wireless adds convenience for appropriate applications.

101. C — Elevated rack mounting, water-detection sensors, and coordination with MEP for drainage and leak prevention. Previous flood damage demonstrates real facility risk requiring designed-in protection. Elevated equipment, water detection, and MEP coordination prevent recurrence of the documented hazard.

102. A — Regular OAC meeting attendance for AV-specific coordination and issue resolution. The AV designer's participation in construction meetings ensures timely resolution of AV-related issues. Regular attendance prevents problems from escalating into costly rework.

103. D — Privacy policy, consent notification, retention policy, and jurisdictional recording laws must be addressed. Automatic recording creates legal obligations around consent, notification, retention, and access. Many jurisdictions require all-party consent for recording, making automatic recording without compliance infrastructure a legal liability.

104. B — Submit RFI with proposed alternative routing coordinated with structural and electrical engineers. Unexpected obstructions require formal documentation and coordinated resolution. The RFI creates the paper trail for revised routing while involving all affected trades in the solution.

105. C — Dedicated AV circuits with locking receptacles or covers separate from convenience outlets. Physical protection prevents unauthorized disconnection of AV equipment. Dedicated circuits with locking receptacles or covered outlets ensure AV power remains connected regardless of janitorial activity.

106. A — License ownership transfer to owner with documented license types, renewal terms, and access credentials. Software licenses are intellectual property with defined ownership and renewal obligations. The specification should have established that all licenses transfer to the owner at closeout with complete documentation.

107. D — Phased implementation maintaining operational continuity during construction. Occupied renovation requires careful sequencing that maintains AV service in active areas while construction proceeds in adjacent spaces. Phase planning sequences infrastructure, installation, and commissioning to minimize operational disruption.

108. B — Compare rooms 3 and 7 against working rooms for differences in treatment, placement, configuration, or infrastructure. Isolated room failures indicate room-specific issues rather than system-wide problems. Comparative analysis between problematic and functioning rooms efficiently identifies the differentiating factor.

109. A — Multi-source switching, product demonstration AV, recording capability, and flexible presentation infrastructure. Customer demonstration spaces require versatile AV supporting diverse product presentations. Multi-source capability, recording for follow-up, and flexible infrastructure serve the business function of customer engagement.

110. C — Document lessons learned, archive project documentation, and schedule post-warranty check-in. Professional project closure extends beyond the compliment. Lessons learned improve future projects, archived documentation supports long-term facility management, and post-warranty check-in maintains the professional relationship.