

BICSI Installer 1 Exam

BICSI INST1-V8

Version Demo

Total Demo Questions: 11

Total Premium Questions: 116

Buy Premium PDF

<https://passqueen.com>

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, Safety	21
Topic 2, Installation Preparation	3
Topic 3, Pathways and Spaces	28
Topic 4, Cable Installation	28
Topic 5, Termination	12
Topic 6, Testing	15
Topic 7, Administration	4
Topic 8, Mix Questions	5
Total	116

QUESTION NO: 1

What is the minimum number of consolidation points that should serve an open office furniture cluster?

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: A

Explanation:

The correct answer is **1**. An open-office furniture cluster should be served by at least one consolidation point (CP). The CP is an optional, accessible interconnection in the horizontal cabling subsystem that provides a practical transition between the permanent building cabling and the work-area cabling serving modular furniture. Locating a CP to serve the cluster supports moves, adds, and changes by allowing furniture-side cabling to be rearranged without disturbing the horizontal cable run back to the telecommunications room. The CP is not an additional cross-connect; it is a single connection point in the permanent link and must remain accessible after installation. A single properly located CP is therefore the minimum planning provision for a furniture cluster. The number of ports and expected workstation density determine the CP's capacity and may require a larger enclosure or additional CPs in an actual design, but they do not change the minimum number specified by the question. This open-office approach is consistent with structured-cabling practices for furniture distribution and consolidation-point use described in [BICSI Standards](#) and the TIA telecommunications infrastructure standards overview at [TIA Standards](#).

QUESTION NO: 2

Which of the following is used to equalize potential differences between the SBB on the same floor?

- A. TBB
- B. BBC
- C. RBB
- D. TEBC

ANSWER: B

Explanation:

BBC is correct. In the BICSI bonding-and-grounding architecture, a bonding backbone conductor is used to bond secondary bonding busbars together and maintain them at substantially the same electrical potential. When more than one SBB serves telecommunications spaces on one floor, the BBC provides the intentional low-impedance bonding path between those busbars. This reduces the likelihood that normal or fault-related current, induced voltage, or differences in building grounding paths will produce a hazardous or disruptive voltage difference between interconnected telecommunications components.

The conductor must be installed as part of the documented bonding system, with permanent, accessible connections and an appropriately sized conductor in accordance with the project design and applicable electrical requirements. Establishing a common potential is essential to personnel safety, equipment protection, signal reliability, and effective operation of surge-protective devices. BICSI grounding and bonding practices align with the telecommunications bonding concepts specified by the TIA commercial-building grounding and bonding standard. See the [Telecommunications Industry Association standards resources](#) and BICSI's [standards information](#) for the applicable bonding-system terminology and requirements.

QUESTION NO: 3

A Category 6A cable bundle is being secured in a telecommunications room. The installer is concerned that tightly cinched nylon cable ties could deform the cables and affect transmission performance.

Which method is most appropriate?

- A. Use tightly cinched nylon cable ties at frequent intervals
- B. Use hook-and-loop fasteners without compressing the bundle
- C. Secure each cable directly to the rack with staples
- D. Twist the bundle tightly before applying cable ties

ANSWER: B

Explanation:

Hook-and-loop cable fasteners applied without excessive compression are appropriate for securing the bundle while preserving cable geometry. Category 6A cabling is sensitive to deformation because changes in pair geometry can affect impedance and crosstalk performance. Tight nylon ties can compress or distort cables, especially in large bundles. The bundle should also be supported in a manner that maintains the manufacturer's bend-radius requirements and does not place excessive weight on individual cables.

QUESTION NO: 4

Which is a keyed, contact, moderate loss connector in present use today that is pull & wiggle-proof?

- A. Opti-Jack
- B. SMA 906
- C. Subscriber Connector (SC)
- D. Straight Tip (ST)

ANSWER: D

Explanation:

Straight Tip (ST) is the keyed, physical-contact fiber-optic connector described. Its ferrule is inserted in a keyed orientation and retained by a bayonet-style twist-lock coupling. This positive mechanical coupling resists unintended removal when tension is applied to the connector and prevents the rotational or lateral looseness that can disturb fiber alignment. Those characteristics are commonly summarized as pull-proof and wiggle-proof. The ST design uses a 2.5 mm ferrule and was widely deployed for multimode fiber, particularly in older premises and campus cabling systems; it remains in service and may be encountered during installation, moves, additions, changes, and testing. "Moderate loss" reflects the connector's traditional insertion-loss performance classification compared with more modern precision connector systems, while the physical-contact ferrule interface helps minimize reflection and maintain a stable optical connection. Installers should ensure the bayonet is fully engaged, preserve the key orientation, inspect and clean both mating end faces, and test the completed link in accordance with the applicable project requirements. See the Fiber Optic Association's connector reference at [FOA: Choosing Fiber Optic Connectors](#) and BICSI's standards resources at [BICSI Standards](#).

QUESTION NO: 5

A technician is installing a horizontal link with 88 m (289') of permanent cable. The work-area cord is 5 m (16') and the equipment cord in the telecommunications room is 7 m (23').

What is the most appropriate action?

- A. Reduce the combined length of the equipment and work-area cords
- B. Replace the horizontal cable with Category 6A cable
- C. Add a consolidation point near the work area

D. Increase the permanent cable length to 90 m (295')

ANSWER: A

Explanation:

The installer should reduce the combined cord length because the complete channel is 100 m (328") maximum. The 88 m permanent link plus 12 m of cords produces a 100 m channel, leaving no allowance for measurement uncertainty or additional components. Although the permanent cable is within the 90 m horizontal-cable limit, all cords are included when determining channel length. Reducing a cord provides practical compliance margin without changing the installed horizontal cable.

QUESTION NO: 6

Light pulses in optical fiber cables are subjected to a loss in power as the light pulses travel along the optical fiber. Which of the following terms is used to describe this phenomenon?

- A. Attenuation
- B. Grounding
- C. Crosstalk
- D. Frequency

ANSWER: A

Explanation:

Attenuation is the reduction of optical signal power as light travels through an optical fiber. It is normally expressed in decibels per kilometer (dB/km) and represents the cumulative loss between the transmitter and receiver. In an installed optical-fiber cabling channel, attenuation contributes directly to the link's insertion loss and must remain within the applicable loss budget so that sufficient optical power reaches the receiver for reliable operation. The principal physical causes include material absorption, Rayleigh scattering, and losses associated with bends, splices, connectors, or other connection points. Installers help control avoidable attenuation by following the cable manufacturer's minimum bend-radius and maximum pulling-tension requirements, using approved cleaning and inspection practices for connector end faces, and performing appropriate optical-fiber testing. Optical time-domain reflectometer testing can help locate events and sections of loss, while tier-1 certification testing measures end-to-end insertion loss. The Fiber Optic Association defines attenuation as a loss of optical power and discusses its customary dB/km measurement in its [Fiber Optics Reference Guide](#). Additional terminology and installation guidance are available through [BICSI Standards](#).

QUESTION NO: 7

Which of the following makes the biggest impression on a customer when you are communicating via email?

- A. Choice of words
- B. Body language
- C. Tone of voice

ANSWER: A

Explanation:

Choice of words makes the biggest impression when communicating with a customer by email because the recipient primarily evaluates the message through its written content. Word selection establishes the level of professionalism, clarity, respect, confidence, and helpfulness conveyed by the installer or organization. Clear, courteous, customer-focused language helps ensure that technical information, next steps, schedules, and requests are understood accurately. It also demonstrates

attention to detail and supports the professional customer-service behavior expected of an installer representing a company on a job site. Effective email wording should be direct and easy to understand, use an appropriate greeting and closing, identify needed actions or information, and avoid ambiguous or overly informal phrasing. Since an email may be retained, forwarded, or referenced later, carefully chosen words also create a durable record of the communication and can strengthen the customer's confidence in the work being performed. Guidance on workplace email writing similarly emphasizes that purpose, audience, clarity, and a professional tone are conveyed through the written message itself. See the [BICSI Standards overview](#) and the [Purdue OWL email-etiquette guidance](#).

QUESTION NO: 8

Which of the following is a benefit of air-blown optical fiber cable?

- A. It requires less testing than other types of cables
- B. It can be recovered and reused
- C. It is significantly cheaper than other types of cables

ANSWER: B

Explanation:

It can be recovered and reused is a key benefit of an air-blown fiber system. In this architecture, optical fiber units are installed by compressed air through a previously installed microduct or tube rather than being permanently integrated into a conventional cable pathway. When capacity needs change, the installed fiber unit can be withdrawn from the microduct and replaced with a unit having a different fiber count or type. Provided the removed fiber unit has not been damaged and remains suitable for the intended application, it may be reused. This recoverability supports flexible moves, adds, and changes, while the microduct infrastructure can remain in place for future installations. It also lets designers deploy fiber capacity incrementally rather than placing all anticipated fiber counts on day one. Air-blown-fiber systems therefore provide a practical upgrade path in buildings and campus environments where future growth, technology changes, or route accessibility are considerations. Manufacturer guidance describes blowing and removal as core capabilities of microduct-based fiber systems; see [CommScope's air-blown fiber overview](#) and [Prysmian's air-blown-fiber information](#).

QUESTION NO: 9

Which of the following are typically used to support cables between a cable tray and work area outlets?

- A. J-Hook
- B. Innerduct
- C. Pipe hanger
- D. Trapeze

ANSWER: A

Explanation:

J-Hook is correct because J-hooks are a common pathway-support method for horizontal telecommunications cabling where the cable route leaves a main cable tray and continues toward work-area outlets. They form a continuous, open support system along the route, allowing cable bundles to be placed without tight ties or sharp contact points that could deform the cable or impair transmission performance. Properly sized J-hooks are installed at suitable intervals, securely fastened to the building structure or an approved support system, and selected so the supported cable bundle does not exceed the hook's listed fill capacity. Their curved profile also helps preserve the required bend radius as cables transition from the tray toward outlet locations. Installation practice should keep the cabling accessible for future additions, moves, and maintenance, while maintaining separation from sources of electromagnetic interference and other building services where required. BICSI installation practices emphasize using dedicated, properly supported pathways that protect cable performance throughout the permanent link. See BICSI's standards and publications information at <https://www.bicsi.org/standards> and the cable-support guidance from the National Electrical Contractors Association at <https://www.necanet.org/>.

QUESTION NO: 10

Fall protection is required whenever a person is exposed to a fall hazard more than ____?

- A. 1.2 m (4')
- B. 1.83 m (6')
- C. 2.4 m (8')
- D. 3 m (10')

ANSWER: B

Explanation:

1.83 m (6') is correct. For construction work, the commonly applied OSHA threshold requires fall-protection systems when an employee is on a walking-working surface with an unprotected side or edge that is 6 ft (1.8 m) or more above a lower level. This protection may consist of guardrail systems, safety-net systems, or personal fall-arrest systems, selected and used according to the task and site conditions. Communications-cabling installation often involves work from elevated platforms, ladders, structural members, and open-sided areas, so installers must identify the potential lower level and ensure that appropriate fall protection is in place before exposure occurs. The 6 ft threshold is a key safety benchmark for construction activities and should be supplemented by the employer's site-specific fall-protection plan, equipment manufacturer instructions, and any stricter jurisdictional or customer requirements. OSHA's construction standard states the 6 ft requirement for unprotected sides and edges in 29 CFR 1926.501(b)(1): [OSHA 1926.501](#). OSHA also provides practical fall-protection resources for construction personnel at [OSHA Fall Protection](#).

QUESTION NO: 11

Which type of cabling is installed between a main cross connect and a horizontal cross connect?

- A. Second-level backbone
- B. First-level backbone
- C. Horizontal

ANSWER: B

Explanation:

First-level backbone is the cabling installed between a main cross-connect and a horizontal cross-connect. Backbone cabling provides the interconnection between telecommunications spaces and cross-connects, rather than serving individual work-area outlets. In a hierarchical star topology, the main cross-connect is the central backbone distribution point, while the horizontal cross-connect is the location where horizontal cabling serving a floor or area is cross-connected to the backbone. The direct backbone segment linking these two cross-connect levels is identified as first-level backbone cabling. This cabling may use balanced twisted-pair, optical-fiber, or other recognized backbone media, provided the selected medium and installation comply with the applicable design and performance requirements. Proper identification of the backbone level is important because installers must maintain the intended topology, termination practices, administration, pathway support, and separation requirements for the cabling system. TIA's commercial-building cabling standard describes the backbone subsystem and the hierarchical distribution structure used to connect telecommunications spaces: [ANSI/TIA-568.1-E information](#). BICSI's standards resources also provide the industry framework for planning and installing structured telecommunications cabling infrastructure: [BICSI Standards](#).