CERTIFBUS

KNX Basic: 34 exam statements with answers

Independent practice for the theory exam, in true/false format

Edition of November 15, 2026 · certifbus.com

> The KNX Basic theory exam has 100 true/false statements to answer in 90 minutes. Scoring: +1 for a correct answer, −0.5 for a wrong one, 0 for no answer.
>
> These statements are independent practice exercises, not copies of official exam papers. They do not replace training at a certified centre or hands-on ETS practice.

Statements

Tick true or false, then check against the answer key.

KNX System Arguments

1. Twisted Pair (TP) is the most widely used KNX medium.
   ☐ True ☐ False
2. A KNX installation requires a central control unit (such as a PC) to coordinate the bus devices.
   ☐ True ☐ False
3. When two different media are connected (e.g. TP and RF), a media coupler must be used.
   ☐ True ☐ False
4. The IP medium is the preferred choice when no cables can be installed.
   ☐ True ☐ False
5. In E-Mode, the application program is pre-installed in the device and configuration is done without a PC.
   ☐ True ☐ False

System Overview

6. In KNX there are two types of addressing: individual addressing and group addressing.
   ☐ True ☐ False
7. An individual address shall be unique within a KNX installation.
   ☐ True ☐ False
8. Normal communication between devices in a KNX installation is carried out via group addresses.
   ☐ True ☐ False
9. In the ETS configuration steps, group addresses are assigned in order to logically connect sensors and actuators and thereby realise the desired functions.
   ☐ True ☐ False

KNX Topology

10. The individual address serves to clearly identify a bus device and describes its location within the topology.
    ☐ True ☐ False

11. The individual address is structured in the order Line.Area.Device (for example 1.1.5).
☐ True ☐ False

12. In the individual address, the area field A can address the areas 1 to 16.
☐ True ☐ False

13. The device field B can address bus devices numbered 1 to 256 on a line.
☐ True ☐ False

14. The individual address of an unloaded bus device is 15.15.254.
☐ True ☐ False

KNX Installation

15. The maximum total cable length of a line segment using certified KNX TP cable is 1000 m.
☐ True ☐ False

16. In the used wire pair of the KNX bus cable, red is plus and black is minus.
☐ True ☐ False

17. A terminating resistor is not required in a KNX TP installation.
☐ True ☐ False

18. In a KNX TP installation, the maximum permitted length of a single line segment is 1000 m.
☐ True ☐ False

19. The insulation resistance of the bus cable shall be at least 500 kΩ.
☐ True ☐ False

KNX Bus Devices

20. A functioning KNX bus device principally consists of three interconnecting parts: a bus coupling unit (BCU), an application module (AM) and an application program (AP).
☐ True ☐ False

21. Depending on their main function, bus devices are basically divided into just two classes: sensors and actuators.
☐ True ☐ False

22. In start/stop dimming, operating the rocker longer than the parameterized time transmits a 'start dimming' telegram.
☐ True ☐ False

23. Blind and shutter control, like dimming, distinguishes between a brief and a long operation of the rocker.
☐ True ☐ False

24. The mask version stored in a KNX device consists of 4 bytes.
☐ True ☐ False

KNX RF (Radio)

25. KNX RF allows the wireless transmission of telegrams by means of the medium Radio Frequency, so a separate bus cable is not required.
☐ True ☐ False

26. KNX RF is especially interesting when an existing TP installation has to be extended and no additional cables can be installed due to building regulations or aesthetic reasons.
☐ True ☐ False

27. The free-field range of KNX RF is limited to approximately 100 m.
☐ True ☐ False

28. KNX RF uses the 868 MHz frequency band.
☐ True ☐ False

29. In the KNX RF system, 868.30 MHz is used as the middle (centre) frequency.
☐ True ☐ False

ETS6 Professional

30. The ETS6 Menu bar can be temporarily shown by pressing the CTRL key.
☐ True ☐ False

31. Before you can download the individual address and/or application program from the commissioning PC to the KNX installation, the bus interface settings must have been set correctly.
☐ True ☐ False

32. ETS distinguishes four download parts of a KNX device: the individual address, the application program(s), the group addresses (with their links/tables), and the parameters.
☐ True ☐ False

33. The ETS diagnostics function requires direct bus access, so the computer must be connected to the KNX installation via a USB interface (KNX TP or RF USB) or an IP interface (KNX TP/IP).
☐ True ☐ False

34. The three ETS telegram-monitoring tools are the Bus Monitor, the Group Monitor and the Project Check.
☐ True ☐ False

Answer key

KNX System Arguments

1. **Answer: True.** Correct — TP is the most widely used medium; the control cable runs parallel to the 230 V cable.
2. **Answer: False.** False — every KNX bus device has its own microcontroller, so no central control unit is needed.
3. **Answer: True.** Correct — media couplers are used to connect different media.
4. **Answer: False.** False — that is RF. IP is preferred for a fast backbone in large installations and for communication with mobile devices.
5. **Answer: True.** Correct — E-Mode uses a central controller / push buttons, no PC, and the app program is pre-installed.

System Overview

6. **Answer: True.** KNX uses two types of addressing: the individual address designates one bus device, and group addresses carry the normal communication between devices.
7. **Answer: True.** Each individual address may be used only once in a KNX installation: it designates exactly one bus device.
8. **Answer: True.** In normal operation, devices exchange their telegrams through group addresses; the individual address is used mainly for programming with ETS.
9. **Answer: True.** Assigning group addresses is one of the ETS configuration steps: it logically connects sensors and actuators and thereby realises the desired functions.

KNX Topology

10. **Answer: True.** Correct. The individual address serves to clearly identify the bus device and describes its location within the topology.
11. **Answer: False.** False. The individual address is structured Area.Line.Device (A.L.B), e.g. 1.1.5 = area 1, line 1, device 5 - not Line.Area.Device.
12. **Answer: False.** False. A = 1...15 addresses the areas 1 to 15 (at most 15 areas). A = 0 addresses the bus devices on the backbone line.
13. **Answer: False.** False. B = 1...255 addresses the bus devices on a line; the maximum device number is 255, not 256. B = 0 addresses the line coupler.
14. **Answer: False.** False. The individual address of an unloaded bus device is 15.15.255 (the maximum address). New devices are typically delivered ex-factory with 15.15.255.

KNX Installation

15. **Answer: True.** Only the standardized green KNX TP cable guarantees reliable transmission over the total cable length of the line segment, up to a maximum of 1000 m.
16. **Answer: True.** The text states the used wire pair is red for plus and black for minus.
17. **Answer: True.** The documentation states plainly that a terminating resistor is not required.

18. **Answer: True.** Correct. The physical limits of a KNX TP installation set the maximum length of a line segment at 1000 m.

19. **Answer: True.** Correct. The insulation resistance of the bus cable shall be at least 500 kΩ.

KNX Bus Devices

20. **Answer: True.** A functioning bus device principally consists of three interconnecting parts: the bus coupling unit (BCU), the application module (AM) and the application program (AP).

21. **Answer: False.** The text lists three classes: sensors, actuators and controllers, not two.

22. **Answer: True.** True. A press longer than the parameterized time is interpreted as the beginning of a dimming action ('start dimming').

23. **Answer: True.** True. The course states the blind/shutter operation functions similarly to dimming, distinguishing a brief from a long rocker operation.

24. **Answer: False.** The mask version consists of 2 bytes, not 4.

KNX RF (Radio)

25. **Answer: True.** KNX RF transmits telegrams wirelessly by radio frequency, so no dedicated bus cable is needed.

26. **Answer: True.** This is the key use case of KNX RF: extending a TP installation where new cables cannot be laid, for example in museums or public buildings.

27. **Answer: True.** The free-field range of KNX RF is limited to approximately 100 m, because of the maximum allowed transmission power and the limited energy of battery-operated or battery-free devices.

28. **Answer: True.** KNX RF transmits in the 868 MHz frequency band; its centre frequency is 868.30 MHz.

29. **Answer: True.** 868.30 MHz is the centre frequency of KNX RF; the '0' and '1' states are formed by a slight frequency deviation around it.

ETS6 Professional

30. **Answer: False.** The Menu bar is temporarily shown by pressing the ALT key, not CTRL.

31. **Answer: True.** To set up the connection between a computer and a KNX installation, for example to download the individual address or the application program, the bus interface settings must first be set correctly.

32. **Answer: True.** ETS distinguishes these download parts: the individual address, the application program(s), the group addresses (with the links between group objects and the tables) and the parameters.

33. **Answer: True.** The diagnostics function of ETS requires direct bus access, through a USB interface (TP or RF USB) or an IP interface (TP/IP).

34. **Answer: False.** False: the three monitors are the Bus Monitor, the ETS Bus Activity Monitor and the Group Monitor; the Project Check is an offline project test, not a monitor.

Ten statements to answer online every day, free and without sign-up: certifbus.com/en/exam

CertifBus is independent and is not affiliated with KNX Association or any manufacturer. KNX is a trademark of KNX Association.