

Self-assessment HVAC Sensors

Project number: 2021-1-DE02-KA220-VET-000029587

PR3/A2: Self-training material for enriching current online experiments



Co-funded by the European Union

2021-1-DE02-KA220-VET-000029587

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.







- 1. What is the primary function of an HVAC system?
- a) To provide a comfortable indoor temperature
- b) To ensure proper ventilation
- c) To maintain ideal humidity levels
- d) All of the above
- 2. Which component in an HVAC system acts as the heart, housing various elements that control and distribute air throughout a building?
- a) Thermostat
- b) Air Handling Unit (AHU)
- c) Compressor
- d) Condenser
- 3. What role does the thermostat play in an HVAC system?
- a) It cools the indoor air
- b) It distributes air throughout the building
- c) It sets the desired temperature and mode of operation
- d) It filters the air
- 4. Which of the following is NOT a function of the ventilation process in an HVAC system?
- a) Bringing in fresh air from outdoors
- b) Removing stale air
- c) Cooling the indoor air
- d) Regulating humidity levels
- 5. What is the primary difference between standard fluid coils and direct expansion (DX) coils in an HVAC system?
- a) Fluid coils use refrigerant while DX coils use water
- b) Fluid coils use water or a glycol/water mixture, while DX coils use refrigerant
- c) Fluid coils are used for heating, while DX coils are used for cooling
- d) Fluid coils are found in split systems, while DX coils are in ductless systems
- 6. In the history of HVAC, who invented the first modern air conditioning system and in what year?
- a) Andrew Ure in 1830
- b) Willis Carrier in 1902
- c) The Egyptians in ancient times
- d) The Romans during the Industrial Revolution
- 7. Which type of HVAC system is ideal for providing individual room temperature control without using ductwork?

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



²⁰²¹⁻¹⁻DE02-KA220-VET-000029587





- a) Split System
- b) Hybrid Split System
- c) Packaged Heating and Cooling System
- d) Ductless Mini-Splits
- 8. What is the main advantage of using a zoned HVAC system?
- a) It is more affordable than other systems
- b) It provides personalized temperature control for different areas
- c) It requires no maintenance
- d) It heats and cools faster than other systems
- 9. What is a common cause of negative pressure in an HVAC system, and why is it problematic?
- a) High fan speed; it makes the system more efficient
- b) Leaks in the ductwork; it improves airflow
- c) Cracks in the vents; it pulls unfiltered air into the home
- d) Dirty filters; it increases system efficiency
- 10. What HVAC component uses a desiccant to remove moisture from the air?
- a) Humidifier
- b) Air Handler
- c) Desiccant Air Dryer
- d) Thermostat

Right answer:

- 1. D
- 2. B
- 3. C
- 4. C
- 5. B
- 6. B
- 7. D
- 8. B
- 9. C
- 10. C

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.





Learning Engineering Environment 2021-1-DE02-KA220-VET-000029587



Co-funded by the European Union

2021-1-DE02-KA220-VET-000029587

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

