



Erasmus+



Erasmus+ program Partnership for Digital Education
Readiness “Smart School in restoration and construction
industry” No. 2020-1-LV01-KA226-VET-094520

O2 Virtual Learning Materials

HEAT PUMP – choice of answers

1. It does not belong to the types of heat pumps

- a) air - air
- b) earth - earth
- c) water - water

2. Coefficient number of the heat pump is

- a) COP
- b) VOP
- c) CTC

3. Closed circuit of the heat pump form

- a) compensator, condenser, expansion valve, evaporator
- b) evaporator, compressor, compensator, expansion valve
- c) evaporator, compressor, condenser, expansion valve

4. The Air-Water heat pump is ideal for

- a) houses with a smaller land and heating renovations
- b) winter gardens to maintain a constant temperature, e.g. cottage
- c) new houses and hoses with larger land

5. It is not included in the operating modes of the heat pump

- a) monovalent
- b) monochromatic
- c) monoenergetic

6. The Water–Water heat pump gains heat from

- a) a garden or a thermal well
- b) the ground in a well or from the garden, where plastic hoses filled with antifreeze are stored
- c) the air

7. The role of the compressor is

- a) to suck in vapours from the evaporator, compress them and push them out into the condenser
- b) to suck in vapours from the condenser, compress them and push them out into the evaporator
- c) to suck in vapours from the evaporator, compress them and push them out into the compensator

8. The heat pump in SPLIT design is

- a) divided into an indoor unit and an outdoor unit, between which there is a throttle valve
- b) divided into an indoor and an outdoor unit by the compensator
- c) divided into an indoor unit and an outdoor unit which are connected by a refrigerant pipe

9. Which statement is not correct?

- a) In the condenser the temperature from the refrigerant is transferred to the water, which is used for heating or heating the domestic hot water.
- b) The liquefied coolant enters the expansion valve, where its pressure is suddenly released and it is able to re-absorb additional heat from the surroundings.
- c) Heat from the surroundings is transferred in the evaporator (heat exchanger) to the condenser.

10. The heat pump performance number 5 means that

- a) if we supply 5 kW in the form of electrical energy, we get 5 kW of heat on the heating side
- b) if we supply 1 kW in the form of electrical energy, we get 5 kW of heat on the heating side
- c) if we supply 5 kW in the form of electrical energy, we get kW of heat on the heating side

“Virtual material prepared within Erasmus+ program project “Smart School in Restoration and Construction Industry” co-funded by the European Union”

"The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."