

Module 12 : AIR-CONDITIONING SYSTEM

Name:

Date:

Part A: Multiple choice question (MCQ)

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| <p>1) What is the purpose of condenser?</p> <p>(a) to compress the Freon gas.<br/> (b) to change liquid to gas.<br/> (c) to remove heat<br/> (d) to remove power</p> <p>2) What is the condition of refrigerant when it passes through condenser coil?</p> <p>(a) it changes from gas to gas<br/> (b) it changes from gas to liquid<br/> (c) it changes from liquid to gas<br/> (d) no changes</p> <p>3) What is BTU representing?</p> <p>(a) Britain Thermometer unit<br/> (b) British Thermal Unit<br/> (c) British Term Unit<br/> (d) Better Temperature Unit</p> <p>4) "This function to control the flow refrigerant and change from hot pressure to low pressure." This refer to...</p> <p>(a) expansion valve<br/> (b) compressor<br/> (c) condenser<br/> (d) control valve</p> <p>5) The following are the Freon agents, except.</p> <p>(a) Chlorofluorocarbon (CFC)<br/> (b) Hydrogenated CFC (HCFC)<br/> (c) Hydrofluorocarbon (HFC)<br/> (d) Hydrogen</p> | <p>6) What is the formula for calculating power from a cooling capacity value?</p> <p>(A) <math>P = \text{BTU} \div 3.413</math><br/> (B) <math>P = V + \text{BTU}</math><br/> (C) <math>P = \text{BTU} \div (V \times I)</math><br/> (D) <math>P = V \times I \times \text{BTU}</math></p> <p>7) Centrifugal compressor is used for</p> <p>(a) small factory<br/> (b) large buildings<br/> (c) residential<br/> (d) shop lot unit</p> <p>8) What is the protection rating to be used for air-conditioner unit according to local regulation?</p> <p>(a) 6 A or 10 A MCB<br/> (b) 16 A or 20 A MCB<br/> (c) 10 A or 32 A MCB<br/> (d) 32 A or 40 A MCB</p> <p>9) What is another name for expansion valve?</p> <p>(a) cooling device<br/> (b) metering device<br/> (c) power device<br/> (d) control device</p> <p>10) Which of the following gas is been replaced with R410A?</p> <p>(a) R-32<br/> (b) R-134<br/> (c) R-22<br/> (d) R-11</p> |
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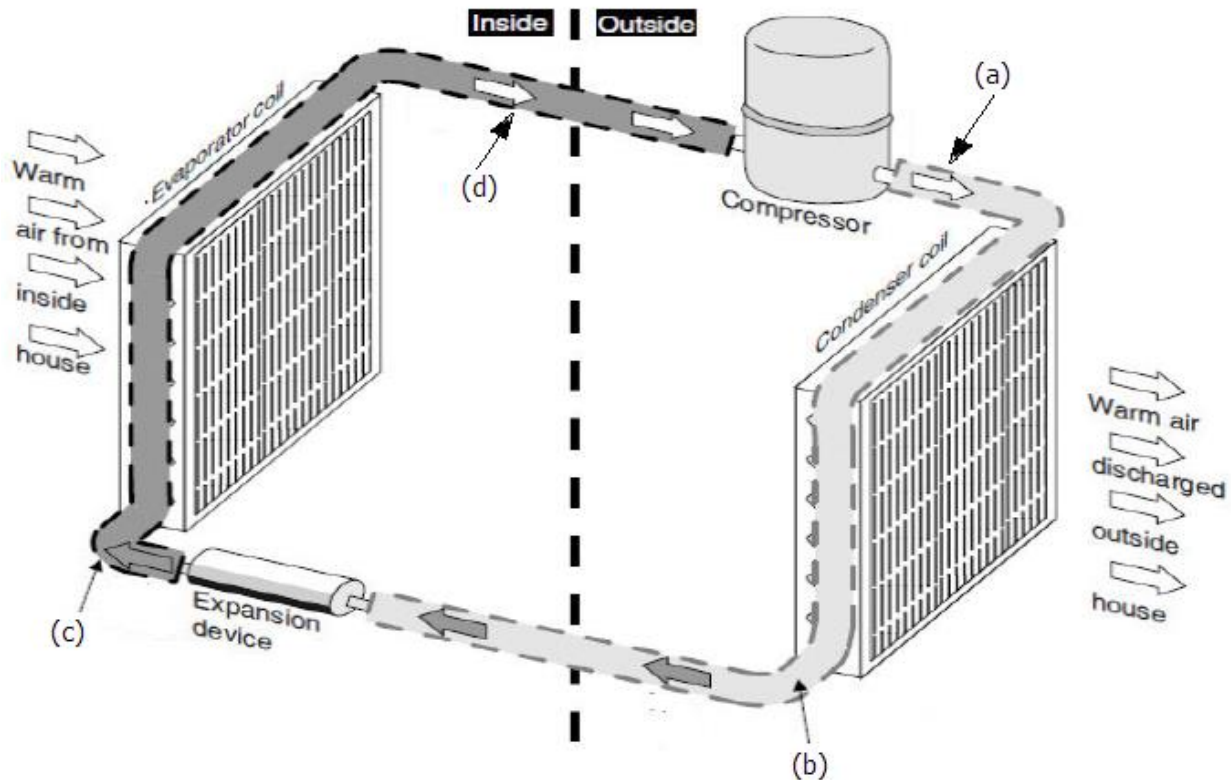
- 11) R134A is a new Freon gas for which application?
- (a) automotive
  - (b) residential
  - (c) office building
  - (d) factory building
- 12) Evaporator is also known as.
- (a) cooling coil
  - (b) meter unit
  - (c) fan coil unit
  - (d) expansion valve
- 13) What is the function of single phase fan at compressor side?
- (a) to increase current flow
  - (b) to remove heat
  - (c) to cool down the compressor
  - (d) to increase pressure
- 14) List below are the types of air flow distribution system, except.
- (a) ducting system
  - (b) air handling unit
  - (c) chill water system
  - (d) chain drive system
- 15) This process is to compress the refrigerant from low pressure to high pressure. The statement above refers to.
- (a) condenser coil
  - (b) evaporator coil
  - (c) expansion valve
  - (d) compressor unit
- 16) What is the color of R410 canister?
- (a) blue
  - (b) green
  - (c) magenta
  - (d) yellow
- 17) What is the problem when expansion valve starts to freeze with ice?
- (a) condenser is leaking
  - (b) blocked
  - (c) too hot
  - (d) Freon gas is depleted
- 18) What does system 1:2 means?
- (a) 2 compressor with 2 fan coil unit
  - (b) 2 compressor with 1 fan coil unit
  - (c) 1 compressor with 1 fan coil unit
  - (d) 1 compressor with 2 fan coil unit
- 19) For industrial application, the types of air-conditioner unit are listed below, except.
- (a) central air-conditioner unit
  - (b) chiller unit
  - (c) automobile
  - (d) cooling tower system
- 20) Office building are commonly installed with this type of air-conditioning system.
- (a) water system
  - (b) ceiling fan
  - (c) air curtain
  - (d) chiller unit

Part B: Subjective Question

1) List out the four(4) types of compressor you know.

- (i).....
- (ii).....
- (iii).....
- (iv).....

2)



Indicate the pressure level (LOW / HIGH) at point (a),(b),(c) and (d) (6 marks)

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_
- (d) \_\_\_\_\_

Indicate what is the refrigerant status on following point (VAPOR / LIQUID) ; (4 marks)

- (a) & (d) is; \_\_\_\_\_
- (b) & (c) is; \_\_\_\_\_

3) Explain two function of condenser unit.

- .....
- .....
- .....
- .....