



**NBW-001-005605** Seat No. \_\_\_\_\_

**Third Year B. A. (I.D) (Sem. VI) (CBCS) Examination**

**April / May - 2017**

**Services - III**

*(Air Conditioning)*

**Faculty Code : 001**

**Subject Code : 005605**

Time : 2 Hours]

[Total Marks : 50

**Instruction :** (1) All questions are compulsory.  
(2) Any ambiguity will be considered as a wrong answer.

**1 Multi choice questions : 10**

(1) Refrigerant used for Air conditioning is...

(A) R 24

(B) R 22

(C) R 28

(D) R 21

(2) Which of the following does not affect air conditioning of interior space?

(A) Orientation of room

(B) Occupancy level

(C) Color of internal surfaces

(D) Activity pattern

(3) Which of the following affects maximum to air conditioning of interior spaces?

(A) Material used for furniture

(B) Size and orientation of openings

(C) Activity pattern

(D) Duration of usage of interior space.

(4) Which of the following type of AC have ducting?

(A) Ceiling mounted split AC

(B) Central plants

(C) Window AC

(D) Cassette type Split AC

- (5) In which type of AC, compressor and cooling coil remains at same place in room.
- (A) Window AC
  - (B) Ceiling mounted split AC
  - (C) Cassette type Split AC
  - (D) Central plants
- (6) Moisture in the air accumulates as water around..... That needs to be drained out.
- (A) Compressor
  - (B) Suction line
  - (C) Discharge line
  - (D) Evaporator
- (7) Which of the following is not the criteria for installation of out door unit of AC at coastal areas?
- (A) Wind direction
  - (B) Tonnage of IDU
  - (C) Level of ODU from ground
  - (D) Anti corrosive material for frame work
- (8) Which is ideal condition for split AC?
- (A) Maximum distance between IDU and ODU
  - (B) Minimum distance between IDU and ODU with more bends in pipes
  - (C) Maximum distance between IDU and ODU with more bends in pipes
  - (D) Minimum distance between IDU and ODU with less bends in pipes
- (9) In which system, air is cooled and conditioned in the plant room and then air is pumped to various parts of building through ducts.
- (A) Chilled water system
  - (B) Direct Expansion (DX) system
  - (C) Non-ducted AC system
  - (D) Split AC
- (10) According to recent study, refrigerant used in AC that needs to replace by some other gas because.....
- (A) R22 damages Ozone layer when it leaks
  - (B) R22 has very bad odor
  - (C) Very costly
  - (D) Not easily available

- 2** Fill in the blanks : **5**
- (1) Full form of AHU is \_\_\_\_\_
  - (2) Full form of HVAC is \_\_\_\_\_
  - (3) Full form of CFCs is \_\_\_\_\_
  - (4) Full form of EER is \_\_\_\_\_
  - (5) Full form of DX is \_\_\_\_\_
- 3** Attempt the following questions : (Any **Five**) **25**
- (1) What is the principle of air conditioning? How the air conditioning functions, explain in detail.
  - (2) Explain different types of air conditioning systems.
  - (3) What is window AC? Where it is used? Discuss advantages and disadvantages.
  - (4) Compare: Window AC and split AC
  - (5) How central air conditioning plants work? Where this method is adapted for cooling? Discuss the advantages and disadvantages of this method.
  - (6) What is the importance of air conditioning?
  - (7) How split AC differs from window AC?
- 4** Attempt the following short questions : (Any **five**) **10**
- (1) What is indoor unit?
  - (2) What is refrigerant?
  - (3) What is compressor?
  - (4) What is condenser?
  - (5) Which is a better compressor; Rotary or Scroll? Why?
  - (6) What is a split air conditioner unit?
  - (7) What is necessity of drainage of condensated water ?
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