

## Refrigeration and Air Conditioning (Mock paper)

### Semester VI

Q.1) One tonne refrigerating machine means.....

- A. One tonne is the total mass of the machine
- B. One tonne of refrigerant is used
- C. One tonne of water can be converted into ice
- D. One tonne of ice when melts from at  $0^{\circ}\text{C}$  in 24 hours, the refrigeration effect produced is equivalent to 210 kJ/min

Q.2) During a refrigeration cycle, heat is rejected by the refrigerant in a.....

- A. Condenser
- B. Compressor
- C. Evaporator
- D. Expansion valve

Q.3) One tonne of refrigeration is equal to

- A. 21/kJ/min
- B. 210/kJ/min
- C. 420/kJ/min
- D. 620/kJ/min

Q.4 Air refrigerator works on.....

- A. [Carnot cycle](#)
- B. [Rankine cycle](#)
- C. Reversed Carnot cycle
- D. Bell-Coleman cycle
- E. Both C and D

Q.5) The conditioned air supplied to the room must have the capacity to take up.....

- A. Room sensible heat load only
- B. Room latent heat load only
- C. Both B and C

Q.6) The refrigerant, commonly used in vapour absorption refrigeration systems, is.....

- A. Sulphur dioxide
- B. Ammonia
- C. Freon
- D. Aqua-ammonia

Q.7) The boiling point of ammonia is

A.-10.5°C

B.-30.5°C

C.-33.3°C

C.-77.6°C

Q.8) Which of the following refrigerant has the lowest boiling point?.....

A.Ammonia

B.Carbon dioxide

C.Sulphur dioxide

D.Freon-12

Q.9) Which of the following refrigerant is highly toxic and flammable.....

A.Ammonia

B.Carbon dioxide

C.Sulphur dioxide

D.Freon-12

Q.10) The co-efficient of performance is always.....one

A.Equal to

B.less than

C.Greater than

D.None of the above

Q.11) For winter air conditioning, the relative humidity should not be more than.....

A.40%

B.60%

C.75%

C.90%

Q.13) The sensible heat factor for auditoriam or cinema hall is generally kept as.....

A.0.6

B.0.7

C.0.8

D.0.9

Q.14) The relative coefficient of performance ( C.O.P.)is equal to.....

A.Theoretical C.O.P./Actual C.O.P.

B.Actual C.O.P./Theoretical C.O.P.

**C.Theoretical C.O.P. x Actual C.O.P.**

**D.None of the above**

**Q.15) The sub-cooling in a refrigeration cycle ....**

**A.Does not alter C.O.P.**

**B.Increases C.O.P.**

**C.Decreases C.O.P.**

**C.None of the above**

**Q.16) The highest temperature during the cycle,in a vapour compression system,occures after .....**

**A.Compression**

**B.Condensation**

**C.Expansion**

**C.Evaporation**

**Q.17) In a vapour compression system,the lowest temperature during the cycle occures after.....**

**A.Compression**

**B.Condensation**

**C.Expansion**

**C.Evaporation**

**Q.18) In vapour compression refrigeration cycle,the condition of refrigerant is saturated liquid.....**

A.Before entering the expansion valve

B.Before entering the compressor

C.After passing through the condenser

D.Before passing through the condenser

E.After passing through the expansion or throttle valve

**Q.19) In vapour compression refrigeration cycle,the condition of refrigerant is very wet vapour.....**

A.Before entering the expansion valve

B.Before entering the compressor

C.After passing through the condenser

D.Before passing through the condenser

E.After passing through the expansion or throttle valve

**Q.20) In vapour compression refrigeration cycle,the condition of refrigerant is high pressure saturated liquid ....**

A.Before entering the expansion valve

B.Before entering the compressor

C.After passing through the condenser

D.Before passing through the condenser

E.After passing through the expansion or throttle valve

**Q.21) In vapour compression refrigeration cycle,the condition of refrigerant is superheated vapour .....**

A.Before entering the expansion valve

B.Before entering the compressor

- C. After passing through the condenser
- D. Before passing through the condenser
- E. After passing through the expansion or throttle valve

Q.22) In vapour compression refrigeration cycle, the condition of refrigerant is dry saturated vapour.....

- A. Before entering the expansion valve
- B. Before entering the compressor
- C. After passing through the condenser
- D. Before passing through the condenser
- E. After passing through the expansion or throttle valve

Q.23) The most suitable refrigerant of a commercial ice plant.....

- A. Brine
- B.  $\text{NH}_3$
- C. Freon
- D. Air

Q.24)

The refrigerator which does not require compressor is called.....

- A. Vapour absorption refrigerator
- B. Vapour compression refrigerator
- C. Electrolux refrigerator
- D. Carnot refrigerator

Q.25)

In refrigeration cycle, the flow of refrigerant is controlled by ....

- A. Condenser
- B. Compressor
- C. Evaporator
- D. Expansion valve
- D. None of the above

