

These are sample MCQs to indicate pattern, may or may not appear in examination

**University of Mumbai**  
**Online Examination 2020**

Program: BE Mechanical Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VIII

Course Code: MEC803 and Course Name: Refrigeration & Air Conditioning

Max. Marks: 50

Time: 1hour

**Note to the students:-** All the Questions are compulsory and carry equal marks .

Q	The efficiency of Carnot heat engine is 80 %. Then the COP of refrigerator operating on reversed carnot cycle is equal to ____
A	0.8
B	0.6
C	0.4
D	0.25
Q	If the COP of reversed carnot refrigerator is 4, the ratio of highest to lowest temperature will be
A	2
B	1.75
C	1.25
D	1
Q	Tonne of Refrigeration is depend upon ____
A	amount of heat
B	value of temperature
C	amount refrigerant
D	amount of work supplied
Q	Which of the following is not a non conventional refrigeration system
A	Thermoelectric Refrigeration

B	Thermoacoustic Refrigeration
C	Vortex Tube Refrigeration
D	Ammonia-absorption Refrigeration
Q	For certain Cooling Tower Water Outlet Temperature is 30°C and Ambient WBT is 30°C. Efficiency of the Cooling Tower will be
A	100%
B	50%
C	75%
D	60.50%
Q	R 718 is Designation of
A	Propane
B	Water
C	Sulphur Dioxide
D	Ammonia
Q	Condition of refrigerant before entering the expansion or throttle valve in a vapour compression refrigeration system is
A	Dry Vapour
B	Superheated Vapour
C	Low Pressure Saturated Liquid
D	High Pressure Saturated Liquid
Q	The evaporator generally used for wine cooling and in petroleum industry for chilling oil is
A	plate evaporator
B	finned evaporator
C	tube in tube evaporator
D	shell and tube evaporator
Q	What type of cooling system is used in the large power plants
A	cooling ponds
B	natural flow system
C	cooling tower
D	single deck system
Q	The function of a halide torch is
A	defrosting of the cooling coil

B	superheating the vapour refrigerant
C	detecting leakage of the refrigerant
D	facilitating better lubrication in the refrigerator
Q	The refrigerator which does not require a compressor is known as
A	Vapour compression refrigerator
B	Electrolux refrigerator
C	vapour absorption refrigerator
D	Carnot refrigerator
Q	An Electrolux refrigerator is called
A	Single-fluid absorption system
B	Two-fluids absorption system
C	Three-fluids absorption system
D	Four-fluids absorption system
Q	Absorption system normally uses the following refrigerant
A	Carbon dioxide
B	Sulphur dioxide
C	Ammonia
D	R-12
Q	The dehumidification process, on the psychrometric chart, is shown by
A	Horizontal line
B	Vertical line
C	Inclined line
D	Curved line
Q	The horizontal line in psychrometric chart joining the change of state of air represents
A	Humidification
B	sensible cooling or heating
C	sensible cooling or heating with humidification
D	sensible cooling or heating with dehumidification
Q	The process, generally used in summer air conditioning to condition the air in sea coastal area is called
A	Humidification
B	Dehumidification
C	Heating and humidification
D	Cooling and dehumidification

Q	Hypothetical temperature used to calculate the heat received by outside surface of building wall by combined effect of convection and radiation is called as-
A	Dry bulb temperature
B	Wet bulb temperature
C	Dew point temperature
D	Sol air temperature
Q	Degree of warmth or cold felt by human body does not depend on-
A	Dry bulb temperature
B	Relative humidity
C	Air velocity
D	Dew point temperature
Q	The most commonly used method for design of duct size is
A	Velocity reduction method
B	Equal friction loss method
C	Static regain method
D	Dual duct method
Q	For rectangular ducts, the aspect ratio is equal to-
A	Sum of longer and shorter sides
B	Difference between longer and shorter sides
C	Product of longer and shorter sides
D	Ratio of longer and shorter sides
Q	Equal friction method of designing duct is preferred-
A	When system is balanced
B	When system is not balanced
C	Only for return ducts
D	For any system
Q	When Nitrogen expands at room temperature
A	Heating is produced
B	Cooling is produced
C	Neither heating nor cooling is produced
D	Volume increased
Q	Liquefaction of a gas is always done at a pressure
A	More than atmospheric pressure
B	Less than atmospheric pressure

C	At atmospheric pressure
D	At Absolute pressure
Q	Which method of air liquefaction is more efficient
A	Linde's Method
B	Claude's Method
C	Cascade Method
D	Multiple evaporator vapour compression system
Q	In the Pasteurization Process milk is heated up to temperature of
A	34 degree Celsius
B	40 degree Celsius
C	100 degree Celsius
D	62 degree Celsius

