



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Registration No.:

School of RAC Skills

Session: 2021-22 (Summer Semester)

B. Voc. 1st Semester,

1st In-Sem. Examination

Course Code: RAC1101

Time: 1 Hour

Course Name: Basics of RAC

Max. Marks: 20

Instruction: Write both the answer and option in section A.

Section – A

05X01 = 05 Marks

Q.1) A body named _____ is setup for international acceptance in English?

- a) Conference for SI
- b) General conference in weights and measures
- c) General unit
- d) Unit and measures International

Q.2) Vacuum pressure is?

- a) Pressure above 1atm
- b) Pressure below 1atm
- c) Pressure below atmospheric pressure.
- d) a & c options

Q.3) How many Fundamental units are there?

- a) 5
- b) 6
- c) 7
- d) 8

Q4) Tera has Power of

- a) 10^{24}
- b) 10^{14}
- c) 10^{12}
- d) 10^{34}

Q5) System and surrounding are separated by _____?

- a) Boundary
- b) Fence
- c) Power
- d) Border



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Section – B

03X02 = 06 Marks

- Q. 1 Name and explain types of system?
- Q. 2 Write the unit conversion for following Length?
- a) 25 cm into meter b) 200 mm into meter
- b) 2 inches into cm d) 10 cm into inch
- Q. 3 Define enthalpy and entropy.

Section – C

03X03 = 09 Marks

- Q. 1 Explain the major components of VCR cycle
- Q. 2 Convert the following temperature to the scale
- a) 15° celsius to F b) 32 F into °C
- c) 50 K into °Celsius d) 104 F into K
- Q. 3 What sub-cooled liquid and super heated vapor?

Q.3

Q.3

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2021-22)

ANSWER KEY**Course Code: RAC1101****Course Name: Basics of RAC****Time: 1 Hour****Max. Marks: 20****Section – A**

05X01 = 05 Marks

1. B) General conference in weights and measures
2. A) Pressure below 1 atm.
3. C) 7
4. C) 10^{12}
5. A) boundary

Section – B

03X02 = 06 Marks

Q. 1 Name and explain types of system?

Answer:

Open- There is interaction of energy and mass both.

Closed- There is interaction of energy but not the mass.

Isolated- There is neither interaction of energy nor mass of the surrounding.

Q. 2 Write the unit conversion for following Length?

- | | |
|---------------------|----------------------|
| a) 25 cm into meter | b) 200 mm into meter |
| b) 2 inches into cm | d) 10 cm into inch |

Answer:

- | | |
|------------|-----------------|
| c) 0.25 m | b) 0.2 m |
| d) 5.08 cm | d) 3.937 inches |

Q. 3 Define enthalpy and entropy.

Answer:



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Difference Between Enthalpy and Entropy

Enthalpy

Enthalpy is a kind of energy

It is the sum of internal energy and flows energy

It is denoted by symbol H

It was termed by a scientist named Heike Kamerlingh Onnes

It unit is Jmol^{-1}

Entropy

Entropy is a property

It is the measurement of the randomness of molecules

It is denoted by symbol S

It was termed by a scientist named Rudolf Clausius

It unit is JK^{-1}

Section – C

03X03 = 09 Marks

Q. 1 Explain the major components of VCR cycle

Answer:

Evaporator:

It provides the heat transfer surface through which heat can pass from the refrigerant space into the refrigerant.

Compressor:

The function of the compressor is to compressed the vapor refrigerant to temperature and pressure to such a point so that it may be easily condensed.

Condenser:

It provides heat transfer surface and cools down the refrigerant by water spray or blow of air.

Expansion valve:

It supplies the proper quantity of liquid refrigerant to the evaporator after reducing the pressure.

Q. 2 Convert the following temperature to the scale

a) 15°C to F

b) 32 F into $^{\circ}\text{C}$

c) 50 K into $^{\circ}\text{C}$

d) 104 F into K

Answer:

a) 59 F

b) 0°C

c) -223°C

d) 313 K

Q. 3 What is pressure? Write down different pressure units used in RAC.

Answer:



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

The term **subcooling** (also called undercooling) refers to a liquid existing at a temperature below its normal boiling point. For example, water boils at 373 K; at room temperature (293 K) the water is termed "subcooled". A subcooled liquid is the convenient state in which, say, refrigerants may undergo the remaining stages of a refrigeration cycle

Superheated vapor is solvent vapor heated to and beyond its normal boiling point at atmospheric pressure. Its unique capability is to heat materials to above the normal boiling point of the solvent used.

Qm
27/

Q





BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2021-22)

Course Code: RAC1102

Time: 1 Hour

Course Name: Domestic RAC Appliances

Max. Marks: 20

Instruction:

1. Attempt all Questions.
2. Each question of Section – A carries 01 mark.
3. Each question of Section – B carries 02 mark.
4. Each question of Section – C carries 03 mark.

Section – A

05X01 = 05 Marks

1. What is the state of refrigerant at the exit of compressor?
 - a) Vapour
 - b) Liquid
 - c) Mixture
 - d) None
2. What is the state of refrigerant at the exit of Condenser?
 - a) Vapour
 - b) Liquid
 - c) Mixture
 - d) None
3. What is the condition of pressure and temperature at the exit of Compressor?
 - a) High
 - b) Low
 - c) Moderate
 - d) Low and High
4. What is the condition of pressure and temperature at the exit of Condenser?
 - a) High and Moderate
 - b) High and Low
 - c) Moderate
 - d) Low and High
5. By which component, pressure reduction is done in your room AC?
 - a. Compressor
 - b. Condenser
 - c. Expansion device
 - d. None of the above



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Section – B

03X02 = 06 Marks

1. Define the term Ton of Refrigeration.
2. Write down the name of different processes take place at different components in an Air Conditioning cycle.
3. Write down the classification of compressors.

Section – C

03X03 = 09 Marks

1. Write down the name of tools and equipment used for installation of a room AC.
2. Explain the Air Conditioning cycle with neat sketch in detail.
3. Convert the following:
 - a. 2.5 TR =? KW
 - b. 7 KW =? BTU
 - b. 4 TR =? HP
 - e. 14 KW =? TR
 - c. 10 HP =? KW
 - f. 30000 BTU =? TR

A handwritten signature and a set of initials are present in the lower-left quadrant of the page.

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of RAC Skills****I Semester, 1st In-Sem. Examination****B. Voc. Program, Summer Semester (2021-22)****Course Code: RAC1102****Time: 1 Hour****Course Name: Domestic RAC Appliances****Max. Marks: 20****Instruction:**

1. Attempt all Questions.
2. Each question of Section – A carries 01 mark.
3. Each question of Section – B carries 02 mark.
4. Each question of Section – C carries 03 mark.

Section – A

05X01 = 05 Marks

1. What is the state of refrigerant at the exit of compressor?
a) Vapour
2. What is the state of refrigerant at the exit of Condenser?
b) Liquid
3. What is the condition of pressure and temperature at the exit of Compressor?
a) High
4. What is the condition of pressure and temperature at the exit of Condenser?
a) High and Moderate
5. By which component, pressure reduction is done in your room AC?
c) Expansion device

Section – B

03X02 = 06 Marks

1. Define the term Ton of Refrigeration.

Answer: 1 TR is defined as the heat removal rate so as to freeze 1 ton (1000 kg) of water at 0°C into ice at 0°C in twenty-four hours.

2. Write down the name of different processes take place at different components in an Air Conditioning cycle.

Answer: Vapour compression cycle is made up of 4 fundamental components and processes which are discussed below :

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

<u>Components</u>	<u>Process</u>
Evaporator	Evaporation
Compressor	Compression
Condenser	Condensation
Expansion Device	Expansion

3. Write down the classification of compressors.

Answer:

Based on the working principle:

- i. Positive displacement type
- ii. Roto-dynamic type

Based on arrangement of compressor motor or external drive:

- I. Open type
- ii. Hermetic (or sealed) type
- iii. Semi-hermetic (or semi-sealed) type

Depending upon the construction, positive displacement type compressors used in refrigeration and air conditioning can be classified into:

- i. Reciprocating type
- ii. Rotary type
- iii. screw type
- iv. scroll compressors

Section – C

03X03 = 09 Marks

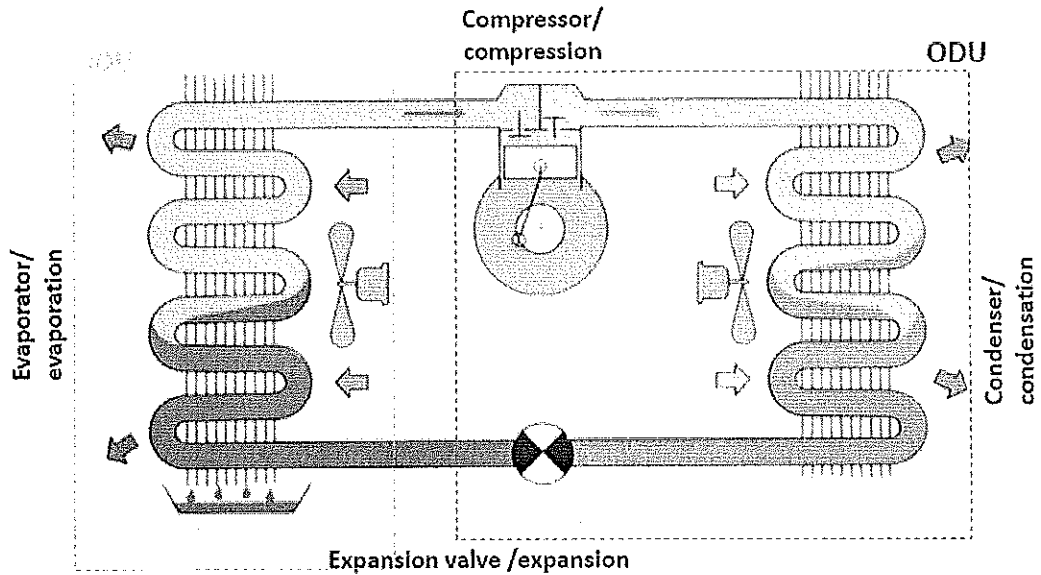
1. Write down the name of tools and equipment used for installation of a room AC.

Answer: Hand Gloves, Goggles, Measuring tape, Spirit level, Drill machine, Hammer, Vacuum pump, Electric wire, Copper tubes, Insulation materials, Fastening plug and screws, Drain pipe, Power supply.

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

2. Explain the Air Conditioning cycle with neat sketch in detail.

Answer:



3. Convert the following:

Answer:

- | | | |
|---------------------|------------------|----------------------|
| a. 2.5 TR = 8.75 KW | b. 4 TR = 4.5 HP | c. 10 HP = 31.1 KW |
| b. 7 KW = 24000 BTU | e. 14 KW = 4 TR | f. 30000 BTU = 2.5TR |





BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2020-21)

Course Code: RAC1103

Time: 1 Hour

Course Name: RAC Electrical, Electronics & Instrumentation-I

Max. Marks: 20

Instruction:

1. Attempt all Questions and write the detailed answer of MCQ's.
2. Each question of Section – A carries 01 mark.
3. Each question of Section – B carries 02 mark.
4. Each question of Section – C carries 03 mark.

Section – A

05X01 = 05 Marks

1. Ampere is the S.I. unit of :
 - a. Current
 - b. Voltage
 - c. Resistance
 - d. Time
2. Ohm's Law deals in which relation?
 - a. $V = I \times R$
 - b. $I = V \times R$
 - c. All of the above
 - d. None of the above
3. Watt is the S.I. unit of
 - a. Resistance
 - b. Voltage
 - c. Power
 - d. Current
4. Capacitor is also known as .
 - a. Transformer
 - b. Regulator
 - c. Condenser



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

- d. Electric Switch
5. Resistance is the?
- Oppose to electric current flow.
 - Oppose to the work done
 - Concentration of work
 - Energy

Section – B

03X02 = 06 Marks

- What is resistance. Explain by giving examples?
- What is a capacitor.
- What is an Inductor?

Section – C

03X03 = 09 Marks

- Describe Ohm's law in detail.
- Explain A.C. and D.C. in detail.
- How we find the value of a resistor.

Rough
A



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2020-21)

ANSWER KEY

Course Code: RAC1103

Time: 1 Hour

Course Name: RAC Electrical, Electronics & Instrumentation -I Max. Marks: 20

Section – A

05X01 = 05 Marks

1. Ampere is the S.I. unit of:

a. Current

2. Ohm's law is deal in which relation?

a. $V = I \times R$

3. Watt is the S.I. unit of

c. Power

4. Capacitor is also known as .

c. Condenser

5. Resistance is the?

a. Oppose to the flow of electric current

Section – B

03X02 = 06 Marks

1. What is resistance. Explain by giving examples?

ANSWER: How much opposition the conductor or metal wire presents to the electric current flow is the electrical resistance. The lower the resistance, the easier current will flow. Think of current like water flowing through a pipe, if the pipe is small there is more resistance to water flow, if the pipe is large the water will flow much easier.

2. What is a capacitor.

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

ANSWER: A capacitor (originally known as a condenser) is a passive two-terminal electrical component used to store energy electro statically in an electric field.

3. What is an Inductor

ANSWER: An Inductor (also known as a choke) is a passive two-terminal electrical component that store energy in a magnetic field when electric current flows through it.

Section – C

03X03 = 09 Marks

1. Describe Ohm's law in detail

Answer : Ohm's law deals with the relationship between potential difference in the circuit and the current flowing in the circuit. This law was discovered by Georg Simon Ohm.

Ohm law states that:

Potential difference (Voltage) applied across conductor is directly proportional to the current flowing through it.

$$V \propto I$$

where, V = potential difference across conductor.

I = current flowing through the conductor.

Here, the constant of proportionality is called RESISTANCE 'R'.

So, $V = I \times R$.

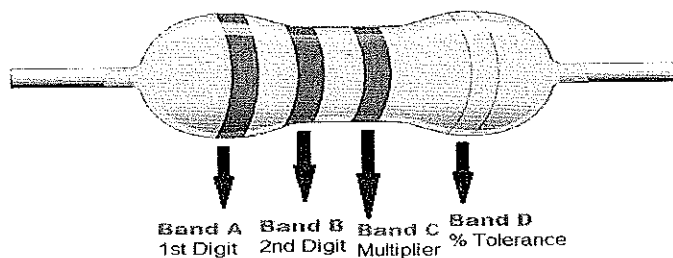
2. Explain A.C. and D.C. in detail.

Answer: The current which changes its directions periodically, such type of current is called alternating current.

When the electric charge inside the conductor flows in one direction, then such type of current is called direct current

3. How we find the value of a particular resistor.

Answer:



Rough

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of RAC Skills
I Semester, 1st In-Sem. Examination
B. Voc. Program, Summer Semester (2021-22)

Course Code: RAC1104**Course Name: RAC Materials and joining processes****Instruction: Attempt all****Time: 1 Hour****Max. Marks: 20****Section – A**

05X01 = 05 Marks

Q1. Which among is used for Permanent joining process?

- a) Cotter pin knuckle joint b) Brazing and welding
c) Bolts and nuts d) Option A, C both

Q2. Area is _____

- a) 2-Dimensional b) 3-Dimensional
c) Space d) None of the above option

Q3. How are elements classified _____?

- a) Metals & Metalloids b) Metals and Non-Metals
c) Elements and compounds d) Isotopes

Q4. _____ is the most malleable metal?

- a) Silver b) Gold
c) Iron d) Brass

Q5. What is ductility of metal _____

- a) To draw into wires b) To be shiny when cutted into pieces
c) Can be drawn into sheets d) Ability to be liquid at room temperature

Section – B

03X02 = 06 Marks

Q6. Draw the flow chart for classification of Engineering materials?

Q7. What are the physical Properties of Metal?

Q8. Difference between Temporary and permanent joints?

Section – C

03X03 = 09 Marks

Q9. Draw the neat sketch of sheet metal tools and their usage?

Q10. What are the safety procedure used in workshop?

Q11. what is soldering?

Handwritten signature
A

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2021-22)

Course Code: RAC1104

Course Name: RAC Materials and joining processes

Instruction: Attempt all

Time: 1 Hour

Max. Marks: 20

Section – A

05X01 = 05 Marks

Q1. Which among is used for Permanent joining process?

- a) Cotter pin knuckle joint b) Brazing and welding
c) Bolts and nuts d) Option A, C both

Q2. Area is _____

- a) 2-Dimensional b) 3-Dimensional
c) Space d) None of the above option

Q3. How are elements classified _____?

- a) Metals & Metalloids b) Metals and Non-Metals
c) Elements and compounds d) Isotopes

Q4. _____ is the most malleable metal?

- a) Silver b) Gold
c) Iron d) Brass

Q5. What is ductility of metal _____

- a) To draw into wires b) To be shiny when cutted into pieces
c) Can be drawn into sheets d) Ability to be liquid at room temperature

Section – B

03X02 = 06 Marks

Q6. Draw the flow chart for classification of Engineering materials?

Q7. What are the physical Properties of Metal?

Q8. Difference between Temporary and permanent joints?

Section – C

03X03 = 09 Marks

Q9. Draw the neat sketch of sheet metal tools and their usage?

Q10. What are the safety procedure used in workshop?

Q11. what is soldering?

havedisharma
A



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of RAC Skills

I Semester, 1st In-Sem. Examination

B. Voc. Program, Summer Semester (2021-22)

Course Code: RAC1104

Time: 1 Hour

Course Name: Rac Materials and joining processes

Max. Marks: 20

Instruction: Attempt all

Section – A

05X01 = 05 Marks

A1.b) Brazing and welding

A2. a) 2-Dimensional

A3. b) Metals and Non-Metals

A4. b) Gold

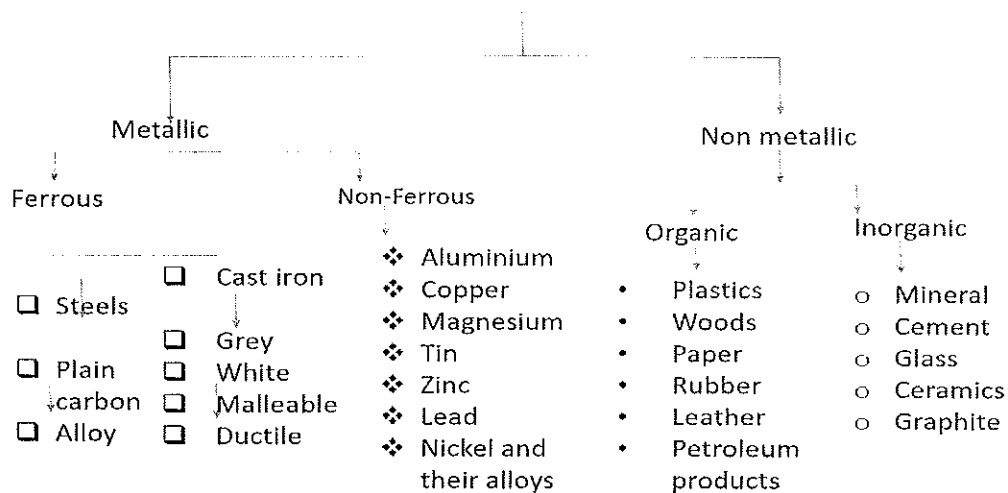
A5. a) To draw into wires

Section – B

03X02 = 06 Marks

Q6. Draw the flow chart for classification of Engineering materials?

Engineering Materials



A6.

Q7. What are the physical Properties of Metal?

A7.

S.No.	Property	Metal

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

1	Malleability	Malleable
2	Ductility	Ductile
3	Brittle	Not brittle
4	Conductivity	Good conductor of heat and electricity
5	Luster	Lustrous
6	Strength	High tensile strength
7	Sonority	Sonorous
8	Hardness	Hard

A8. Difference between Temporary and permanent joints?

Temporary Joint	Permanent Joint
Temporary joints allow easy dismantling of assembled components without breaking them.	Permanent joints don't allow dismantling of assembled components without rupturing them.
Temporary joints are not necessarily leak-proof.	Permanent joints are usually leak-proof.
Strength of temporary joint is comparatively less.	Strength of permanent joint is high. Usually, joint strength is same with that of the components.
Repair and replacement are also easy.	Repair and replacement are difficult and costly.

Section – C

03X03 = 09 Marks

Q9. Draw the neat sketch of sheet metal tools and their usage?

A9.1) Snips-to cut sheets into pieces

2) Centre punch – to make hole in sheet for references for tools to make diameters and radius

3) Vernier caliper -to measure outer inner diameter and depth of circular pieces

4) Protractors- to make sector and segment in sheets

5.) radius gauge to measure outer and inner diameter of the work pieces.

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Q10. What are the safety procedure used in workshop?

- A10. ① use of PPE's (Personal protected equipments) like gloves, mask, goggles.
② use of proper tools and place it on designated space.
③ Tools must be categories and maintained well.
④ First aid should be placed in workshop to overcome injuries.

Q11. what is soldering?

A11. A metal joining technique in which Two same or different base metals are joined with the help of flux and a filler for Joining at a temperature below 450degree Celsius. Used primarily for wires and PCB circuit boards.

Haratik Sharma
A

Test - in series.



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Registration No.:

School of RAC Skills

Session: 2021-22 (Summer Semester)

B. Voc. Program, 1st Semester

1st In-Sem. Examination

Course Code: RAC1105

Time: 1 Hour

Course Name: RAC System Components Testing and performance

Max. Marks: 20

Instruction: Attempt all questions

Section – A

05X01 = 05 Marks

1. Input and output of a refrigerator are 300W and 200W respectively, which statement is true about this refrigerator?
 - a. Refrigerator performing well.
 - b. Low COP
 - c. Fault is refrigerator design
 - d. All of above
2. What is the formula of enthalpy?
 - a. $E+PV$
 - b. $E-PV$
 - c. $U+PV$
 - d. $H+PV$
3. Latent heat when phase changes
 - a. Increases.
 - b. Decreases
 - c. Remains constant
 - d. None of the above.
4. Which of the following is not the temperature scale:
 - a. Celsius
 - b. Fahrenheit
 - c. Rankine
 - d. BTU
5. What does BTU mean:
 - a. British temperature Unit
 - b. British Thermal Unit
 - c. British Temperature Unified
 - d. None of the above

Section – B

03X02 = 06 Marks



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

1. What is the relationship between pressure and temperature?
2. Explain heat, latent heat and sensible heat.
3. What is the definition of pressure?

Section – C

03X03 = 09 Marks

4. What is the difference between conduction and radiation and radiation?
5. Derive an expression for Carnot COP.
6. What are different types of compressor explain in details.

Om

A



School of RAC Skills
Session: 2021-22 (Summer Semester)
B. Voc. Program, 1st Semester
1st In-Sem. Examination

Course Code: RAC1105

Time: 1 Hour

Course Name: RAC System Components Testing and performance

Max. Marks: 20

Instruction: Write both the option and answer in section A.

Answer Key

Section – A

05X01 = 05 Marks

1. Input and output of a refrigerator are 300W and 200W respectively, which statement is true about this refrigerator?
C. Fault is refrigerator design
2. What is the formula of enthalpy?
C. $U+PV$
3. Latent heat when phase changes
a. Increases.
4. Which of the following is not the temperature scale:
a. BTU
5. What does BTU mean:
a. British temperature Unit

Section – B

03X02 = 06 Marks

1. What is the relationship between pressure and temperature?

ANSWER:

The **pressure of a given amount of gas is directly proportional to its absolute temperature**, provided that the volume does not change (Amontons's law). The volume of a given gas sample is directly proportional to its absolute temperature at constant pressure (Charles's law).

2. Explain heat, latent heat and sensible heat.

ANSWER:

he specific heat capacity (which is often shortened to specific heat) of a material is the amount of heat required to change a unit mass of a substance by one unit of temperature.

$$Q = mc\Delta T$$

SENSIBLE HEAT



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Heat level or heat intensity can readily be measured when it changes the temperature of a substance (remember the example of changing 1 lb of water from 68°F to 69°F). This change in the heat level can be measured with a thermometer. When a change of temperature can be registered, we know that the level of heat or heat intensity has changed; this is called sensible heat.

LATENT HEAT

Another type of heat is called latent or hidden heat. Heat is added in this process, but no temperature rise occurs. An example is heat added to water while it is boiling in an open container. Once water is brought to the boiling point, adding more heat only makes it boil faster; it does not raise the temperature.

3. What is the definition of pressure?

ANSWER:

Pressure is the force applied perpendicular to the surface of an object per unit area over which that force is distributed. Gauge pressure is the pressure relative to the ambient pressure. Various units are used to express pressure.

Section – C

03X03 = 09 Marks

4. What is the difference between conduction and radiation and radiation?

ANSWER:

Conduction	Convection	Radiation
In conduction, heat transfer takes place between objects by direct contact.	In convection, the heat transfer takes within the fluid.	In radiation, heat transfer occurs through electromagnetic waves without involving particles.
The heat transfer takes place due to the difference in temperature.	The heat transfer occurs due to the difference in density.	The heat transfer occurs in all objects with a temperature greater than 0 K.
The heat transfer in conduction is slow	The heat transfer in convection is faster.	The heat transfer in radiation is the fastest.
The heat transfer occurs through a heated solid object.	The heat transfer occurs through intermediate objects. For example, heat transfer between air and water.	The heat transfer occurs through electromagnetic waves.
It does not follow the law of reflection and refraction.	It does not follow the law of reflection and refraction.	It follows the law of reflection and refraction.

5. Derive an expression for Carnot COP.

ANSWER:



Coefficient of Performance

The coefficient of performance (CP) for a heat pump is the ratio of the energy transferred for heating to the input electric energy used in the process. In reference to the standard heat engine illustration, the coefficient is defined by

$$\text{Coefficient of Performance} = \frac{Q_H}{W}$$

There is a theoretical maximum CP, that of the Carnot cycle :

General definition	Limit for ideal Carnot case
$\text{CP} = \frac{Q_H}{W} = \frac{Q_H}{Q_H - Q_C}$	$\rightarrow \frac{T_H}{T_H - T_C}$
	Ideal coefficient of performance

For a refrigerator, however, the useful quantity is the heat extracted, Q_C , not the heat exhausted. Therefore, the coefficient of performance of a refrigerator is expressed as

$$\text{CP}_{\text{Refrigerator}} = \frac{Q_C}{W}$$

For consumer refrigerators in the U.S., the coefficient of performance for refrigerators is typically recast into a number called the Energy Efficiency Ratio.

6. What are different types of compressor explain in details.

ANSWER:

Rotary-Screw

Rotary screw compressors contain two meshed male and female rotors that rotate together in opposite directions. The refrigerant enters the compressor through a suction port and gets trapped between the two rotating rotors. As the air travels through the rotors, the volume of space between the rotors decreases, compressing the refrigerant.

Rotary-Scroll

Rotary scroll compressors contain two intermeshing spirals or scrolls with one spiral being fixed while the second orbits within it. As the spiral rotates, vapor pockets are formed. The pockets suck the refrigerant in and moves the vapor towards the center of the spiral. As the vapor gets closer to the center, the pockets continuously decrease in size, compressing the refrigeration.

Reciprocating

Reciprocating compressors have a design similar to a combustion engine and can contain anywhere from two to six pistons housed in individual cylinders. Each of these pistons are driven by a central crankshaft. As the pistons move downward, the refrigerant is sucked into the cylinder through an inlet valve. When the piston moves back upwards, the inlet valve closes, and the volume of space in the cylinder decreases, compressing the refrigerant.

