# 15. Heat Temperature and Pressure

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**Duration: 30 Mins** | **Total Marks: 44** | **ID: ITISKILL7502WU**

Student Name: _____ Roll No: _____

**1.** What is the change in length per unit original length per degree rise in temperature is called?

A) Co-efficient of cubical expansion
B) Co-efficient of superficial expansion
C) Co-efficient of friction
D) Co-efficient of linear expansion

**2.** What is the boiling point of water in fahrenheit scale?

A) 112 Degree F
B) 100 Degree F
C) 180 Degree F
D) 212 Degree F

**3.** What is the ratio of force (or) thrust per unit area?

A) Energy
B) Power
C) Pressure
D) Work

**4.** What is the boiling point of mercury?

A) 357 Degree C
B) 767 Degree C
C) 759 Degree C
D) 280 Degree C

**5.** Which one is a poor heat insulator?

A) Cork
B) Glass
C) Saw dust
D) Rubber

**6.** What is the value in degree centigrade for 20 Degree F?

A) -6.37 Degree C
B) -6.57 Degree C
C) -6.47 Degree C
D) -6.67 Degree C

**7.** How much quantity of heat is required to raise the temperature of 300 grams of copper (sp.heat 0.092 cal/gram) from 25 Degree C to 75 Degree C in Kcal?

A) 2.07 Kcal
B) 1.38 Kcal
C) 207 Kcal
D) 138 Kcal

**8.** What is the SI unit of pressure?

A) Newton
B) Pascal
C) Bar
D) Joule

**9.** Which refers the temperature?

A) It tells specifie heat of substance
B) It is measured by calorie meter
C) It is a form of energy
D) It tells the state of heat

**10.** What is the maximum temperature that can be measured by mercury thermometer?

A) 300 Degree C
B) 200 Degree C
C) 400 Degree C
D) 100 Degree C

**11.** Which kind of heat transmission takes places by up-ward flow?

A) Conduction
B) Radiation
C) Reflection
D) Convection

**12.** Which one is heat insulator?

A) Brass
B) Thermocole
C) Copper
D) Aluminium

**13.** What is the melting point of aluminium?

A) 680 Degree C
B) 620 Degree C
C) 660 Degree C
D) 670 Degree C

**14.** What is the equivalent pascal value for 1 bar?

A) 103 pascal
B) 105 pascal
C) 109 pascal
D) 107 pascal

**15.** Which instrument is used to measure temperatures of red hot metals up to 3000 Degree C?

A) Bimetal thermometer
B) Thermoelectric pyrometer
C) Radiation pyrometer
D) Alcohol thermometer

**16.** What is the boiling point of aluminium?

A) 660 Degree C
B) 1897 Degree C
C) 2519 Degree C
D) 2469 Degree C

**17.** What is the freezing point of water in kelvin scale (K)?

A) 273 Degree K
B) 313 Degree K
C) 373 Degree K
D) 303 Degree K

**18.** What is term used for 2 x linear expansion?

A) Co-efficient of linear expansion
B) Co-efficient of friction
C) Co-efficient of superficial expansion
D) Co-efficient of cubical expansion

**19.** What is the boiling point of water?

A) 0 Degree C
B) 32 Degree C
C) 100 Degree C
D) 212 Degree C

**20.** Which one has the highest thermal conductivity?

A) Water
B) Solid ice
C) Steam
D) Melting ice

**21.** What is called for the amount of heat required to raise the temperature of unit mass of a substance through 1 Degree C?

A) Specific heat
B) Mixing of heat
C) Sensible heat
D) Latent heat

**22.** Which instrument is used to measure heat?

A) Thermometer
B) Pyrometer
C) Calorie meter
D) Barometer

**23.** What is the value for specific heat of water

A) 3
B) 2
C) 1
D) 4

**24.** What is the quantity of heat required to raise the temperature of 1 gram of water through 1 Degree Centigrade is called?

A) Colorie
B) Specific heat
C) British thermal unit
D) Centigrade heat unit

**25.** How much quantity of heat is required? <br> m = 120 litres <br> t1 = 20 Degree C <br> t2 = 85 Degree C <br> S = 4.2 <br> Q = _____ KJ

A) 32780 KJ
B) 32760 KJ
C) 32750 KJ
D) 32770 KJ

**26.** What is known for the temperature at which any solid melts into liquid?

A) Latent heat of vaporisation
B) Latent heat of fusion
C) Boiling point
D) Melting point

**27.** Calculate the amount of heat required to raise the temperature of 85.5 gm of sand from 20 Degree C to 35 Degree C specific heat of sand = 0.1.

A) 126.28 Joules
B) 128.26 Joules
C) 125.28 Joules
D) 128.25 Joules

**28.** Which type heat is the heat absorbed or given off by a substance without changing its physical state?

A) Latent heat of steam
B) Sensible heat
C) Specific heat
D) Latent heat

**29.** What is called for the materials that restricts heat flow by radiation, conduction and convection?

A) Conductors
B) Non-ferrous
C) Ferrous
D) Insulators

**30.** What is the melting point of mercury?

A) -209 Degree C
B) -7.1 Degree C
C) -38.72 Degree C
D) -357 Degree C

**31.** What is the unit of co-efficient of linear expansion?

A) Number / Degree C / mm length
B) Number / Degree C
C) Number / Degree C / meter length
D) Number / Degree C / cm length

**32.** Which one of the following is not a property of heat insulating material?

A) Resistance to fire
B) Less moisture absorption
C) Ductility
D) Low conductivity

**33.** At what temperature will Fahrenheit and centigrade thermometers give the same reading?

A) -40 Degree C
B) -39 Degree C
C) -38 Degree C
D) -41 Degree C

**34.** Convert - 273 Degree C (Centigrade) into kelvin scale?

A) 1 Degree K
B) 3 Degree K
C) 0 Degree K
D) 2 Degree K

**35.** Which insulating material is most widely used in refrigerators?

A) Glass wool
B) Polyurethane
C) Thermocole
D) Cork sheet

**36.** Convert 45 Degree C (Centigrade) into Degree F (Fahrenheit)

A) 112 Degree F
B) 111 Degree F
C) 110 Degree F
D) 113 Degree F

**37.** How much heat is absorbed by a copper ingot weighing 400 Kg is heated from 40 Degree C to 72 Degree C for the purpose of forging? (sp.heat of copper is 0.09)

A) 1215 Kcal
B) 1152 Kcal
C) 1521 Kcal
D) 1251 Kcal

**38.** What is term called for 3 x linear expansion?

A) Co-efficient of friction
B) Co-efficient of linear expansion
C) Co-efficient of superficial expansion
D) Co-efficient of cubical expansion

**39.** What is called if the length of the solid expands when heated?

A) Area expansion
B) Superficial expansion
C) Cubical expansion
D) Linear expansion

**40.** What is the co-efficient of linear expansion of a rod if it is found to be 100 m long at 20 Degree C and 100.14 m long at 100 Degree C?

A) 1.75 x 10-7 / Degree C
B) 1.75 x 10-6 / Degree C
C) 1.75 x 10-4 / Degree C
D) 1.75 x 10-5 / Degree C

**41.** What is the specific heat of the material if we require 510 calories to raise the temperature of 170 gm of material from 50 Degree C to 80 Degree C?

A) 1.1
B) 0.01
C) 1.11
D) 0.1

**42.** What is the S.I unit of heat?

A) Centigrade heat unit
B) British thermal unit
C) Calorie
D) Joule

**43.** Which one is the radiation method of heat transmission?

A) Cold water goes to the bottom from top while on heating the water
B) The heat from sun travels through the space
C) On heating gases, heat transmitted to surroundings
D) An iron rod is heated with one of its end and heat transmitted to other end

**44.** Which type of heat transmission takes place through physical contact?

A) Radiation
B) Convection
C) Conduction
D) Reflection