

**Duration: 30 Mins**

**Total Marks: 44**

**ID: ITISKILL8705XI**

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**10.** 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) 1251 Kcal                              B) 1521 Kcal  
C) 1215 Kcal                              D) 1152 Kcal

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

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

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

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

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

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

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

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

**15.** How much quantity of heat is required?  $m = 120$  litres  $t_1 = 20$  Degree C  $t_2 = 85$  Degree C  $Q = 4.2$   $Q = \underline{\hspace{2cm}}$  KJ

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

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

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

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

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

**18.** 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) 0.1
- B) 0.01
- C) 1.1
- D) 1.11

19. Which refers the temperature?

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

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

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

21. What is the SI unit of pressure?

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

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

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

23. What is the boiling point of aluminium?

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

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

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

25. What is the S.I unit of heat?

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

26. Convert 45 Degree C (Centigrade) into Degree F (Fahrenheit)

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

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

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

28. Which insulating material is most widely used in

refrigerators?

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

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

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

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

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

31. 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)  $1.75 \times 10^{-6}$  / Degree C
- B)  $1.75 \times 10^{-5}$  / Degree C
- C)  $1.75 \times 10^{-7}$  / Degree C
- D)  $1.75 \times 10^{-4}$  / Degree C

32. 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

33. Which one is heat insulator?

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

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

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

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

- A) Specific heat
- B) Calorie
- C) British thermal unit
- D) Centigrade heat unit

36. Which one is the radiation method of heat transmission?

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

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

- A) Conductors
- B) Insulators

C) Non-ferrous

D) Ferrous

38. 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

39. 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) 128.26 Joules

B) 125.28 Joules

C) 128.25 Joules

D) 126.28 Joules

40. What is the value for specific heat of water

A) 3

B) 2

C) 1

D) 4

41. Which one has the highest thermal conductivity?

A) Melting ice

B) Steam

C) Solid ice

D) Water

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

A) 313 Degree K

B) 373 Degree K

C) 303 Degree K

D) 273 Degree K

43. 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) 138 Kcal

C) 1.38 Kcal

D) 207 Kcal

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

A) Radiation pyrometer

B) Bimetal thermometer

C) Thermoelectric pyrometer

D) Alcohol thermometer