15. Heat Temperature and Pressure

Q. ID: ITISKILL7502WU

May 2026 | **Govt ITI Beerihundi** | Answer Key

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

1. Which one has the highest thermal conductivity?

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

Answer: C) Solid ice

2. 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) An iron rod is heated with one of its end and heat transmitted to other end
D) On heating gases, heat transmitted to surroundings

Answer: B) The heat from sun travels through the space

3. What is the boiling point of aluminium?

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

Answer: A) 2519 Degree C

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

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

Answer: B) 32760 KJ

5. Which one is heat insulator?

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

Answer: C) Thermocole

6. Which insulating material is most widely used in refrigerators?

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

Answer: B) Polyurethane

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

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

Answer: D) Pressure

8. Which one is a poor heat insulator?

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

Answer: C) Glass

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

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

Answer: C) Number / Degree C

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

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

Answer: A) 300 Degree C

11. 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

Answer: D) -40 Degree C

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

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

Answer: A) Joule

13. 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

Answer: A) -38.72 Degree C

14. Which refers the temperature?

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

Answer: A) It tells the state of heat

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

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

Answer: A) Convection

16. Which instrument is used to measure heat?

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

Answer: C) Calorie meter

17. What is term used for 2 x linear expansion?

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

Answer: A) Co-efficient of superficial expansion

18. What is the boiling point of mercury?

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

Answer: D) 357 Degree C

19. What is the melting point of aluminium?

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

Answer: B) 660 Degree C

20. What is the SI unit of pressure?

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

Answer: C) Pascal

21. What is the boiling point of water?

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

Answer: A) 100 Degree C

22. What is the value for specific heat of water

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

Answer: D) 1

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

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

Answer: C) Ductility

24. What is term called for 3 x linear expansion?

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

Answer: D) Co-efficient of cubical expansion

25. 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) 207 Kcal
B) 138 Kcal
C) 1.38 Kcal
D) 2.07 Kcal

Answer: C) 1.38 Kcal

26. 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) 125.28 Joules
B) 128.26 Joules
C) 126.28 Joules
D) 128.25 Joules

Answer: D) 128.25 Joules

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

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

Answer: B) 212 Degree F

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

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

Answer: D) Conduction

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

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

Answer: C) 113 Degree F

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

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

Answer: B) Linear expansion

31. 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

Answer: C) Melting point

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

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

Answer: C) Co-efficient of linear expansion

33. What is the equivalent pascal value for 1 bar?

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

Answer: C) 105 pascal

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

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

Answer: C) 273 Degree K

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) Centigrade heat unit
C) Colorie
D) British thermal unit

Answer: C) Colorie

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

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

Answer: A) -6.67 Degree C

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

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

Answer: A) 0 Degree K

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

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

Answer: C) Radiation pyrometer

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

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

Answer: C) Insulators

40. 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) 1.11
B) 0.01
C) 0.1
D) 1.1

Answer: C) 0.1

41. 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

Answer: A) Sensible heat

42. 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) 1152 Kcal
B) 1215 Kcal
C) 1251 Kcal
D) 1521 Kcal

Answer: A) 1152 Kcal

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

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

Answer: B) Specific heat

44. 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 10-5 / Degree C
B) 1.75 x 10-7 / Degree C
C) 1.75 x 10-4 / Degree C
D) 1.75 x 10-6 / Degree C

Answer: A) 1.75 x 10-5 / Degree C