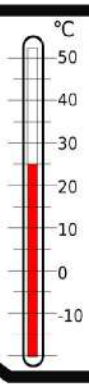

UNIT 8

THERMAL PROPERTIES OF MATTER

MULTIPLE CHOICE QUESTIONS

1. All the bodies expand ---------- on heating:
(a) Variable **(b)** Constantly
(c) Uniformly **(d)** All of them

2. Temperature is the:
(a) Mass contained by the body **(b)** Force of the molecules of body
(c) Degree of hotness or coldness of the body **(d)** none of above

3. The SI unit of temperature is:
(a) ^{o}C **(b)** ^{o}F
(c) K **(d)** ^{o}K

4. Temperature of 30 ^{o}C in Fahrenheit is:
(a) 86 ^{o}F **(b)** 80 ^{o}F
(c) 30 ^{o}F **(d)** 90 ^{o}F

5. Human normal body temperature of 37 ^{o}C in Fahrenheit is:
(a) 98. 6 ^{o}F **(b)** 98 ^{o}F
(c) 100 ^{o}F **(d)** None of above

6. Boiling point of water in Fahrenheit is:
(a) 100 ^{o}F **(b)** 273 ^{o}F
(c) 212 ^{o}F **(d)** 373 ^{o}F

7. Celsius equivalent of 0K is:
(a) -273 ^{o}C **(b)** -459.4 ^{o}C
(c) 0 ^{o}C **(d)** 100 ^{o}C

8. Fahrenheit equivalent of 0K is:
(a) -273 ^{o}F **(b)** -459.4 ^{o}F
(c) 0 ^{o}F **(d)** 100 ^{o}F

9. Heat is a type of ---------- energy:
(a) Kinetic **(b)** Potential
(c) Mechanical **(d)** None of above

10. Linear expansion of a rod occur along ---------- dimension (s):
(a) One **(b)** Two
(c) Three **(d)** All

11. The characteristic of unequal expansion of different metals is employed in a device known as:
(a) Thermometer **(b)** Burner
(c) Calorimeter **(d)** Thermostat

12. Linear expansion depends on:
(a) Length of rod **(b)** Change in temperature
(c) Nature of material of rod **(d)** All of above

13. Thermostat works on the principle of:
(a) Unequal expansion of solids **(b)** Pascal's law
(c) Anomalous expansion of water **(d)** Vaporization

14. Thermostat is used in:
(a) Electric iron **(b)** Refrigerator
(c) Fire alarm **(d)** All of above

15. SI unit of Coefficient of linear & volume expansion is:

(a) m **(b)** K

(c) K^{-1} **(d)** ^{o}C

16. Volume expansion depends on:

(a) Volume of block **(b)** Change in temperature

(c) Nature of material of block **(d)** All of above

17. β = -------

(a) α **(b)** 2α

(c) 3α **(d)** 5α

18. There are ------ type (s) of expansion (s) take place in a liquid filled in a container:

(a) One **(b)** Two

(c) Three **(d)** Four

19. The liquid (s) used in thermometers is (are):

(a) Mercury **(b)** Alcohol

(c) Water **(d)** Both a & b

20. Ice is a (an):

(a) Good conductor **(b)** Bad conductor

(c) Perfect Conductor **(d)** None

21. The quantity of heat that causes 1K change in temperature in a substance of mass 1 Kg is called:

(a) Specific heat **(b)** Latent heat

(c) Heat of exchange **(d)** None of above

22. Unit of specific heat is:

(a) $Jkg^{-1}K$ **(b)** $JkgK^{-1}$

(c) $Jkg^{-1}K^{-1}$ **(d)** J

23. Which of the following has highest specific heat?

(a) Water **(b)** Ice

(c) Mercury **(d)** Alcohol

24. Specific heat of water is: **(GRW 2013, 2014)**

(a) 2100 $Jkg^{-1}K^{-1}$ **(b)** 2500 $Jkg^{-1}K^{-1}$

(c) 3200 $Jkg^{-1}K^{-1}$ **(d)** 4200 $Jkg^{-1}K^{-1}$

25. Climate of regions near sea shore remains moderate due to:

(a) Greater specific heat of water **(b)** Less specific heat of water

(c) Low freezing point of water **(d)** High boiling point of water

26. Cause of land and sea breeze is:

(a) Greater specific heat of water **(b)** Less specific heat of water

(c) Low freezing point of water **(d)** High boiling point of water

27. The device used to measure of the specific heat of an object is:

(a) Thermometer **(b)** Burner

(c) Calorimeter **(d)** Thermostat

28. Quantity of heat that changes one kilogram of a of solid into liquid is called:

(a) Specific heat **(b)** Latent heat of fusion

(c) Latent heat of vaporization **(d)** All of above

29. Quantity of heat that changes one kilogram of a of liquid into gas is called:

(a) Specific heat **(b)** Latent heat of fusion

(c) Latent heat of vaporization **(d)** All of above

30. Unit of latent heat is:

(a) $Jkg^{-1}K$ **(b)** Jkg

(c) J **(d)** Jkg^{-1}

31. Latent heat of fusion of ice is:

(a) 2,260,000 Jkg^{-1} **(b)** 336,000 Jkg^{-1}

(c) 3,260,000 Jkg^{-1} **(d)** None of above

32. Latent heat of vaporization of water is:

(a) 2,260,000 Jkg^{-1} **(b)** 336,000 Jkg^{-1}

(c) 3,260,000 Jkg^{-1} **(d)** None of above

ANSWER KEY

Q.No	Ans	Q.No	Ans	Q.No	Ans	Q.No	Ans
1	c	11	d	21	a	31	b
2	c	12	d	22	c	32	a
3	c	13	a	23	a		
4	a	14	d	24	d		
5	a	15	c	25	a		
6	c	16	d	26	a		
7	a	17	c	27	c		
8	b	18	c	28	b		
9	a	19	d	29	c		
10	a	20	b	30	d		