

Physical and Chemical Changes

Practice Exercise

- Which is not a unit of measuring temperature?
(a) Kelvin (b) Celsius
(c) Pascal (d) Fahrenheit
(e) None of these
- If freezing point of ice is 32°F then find the freezing point of ice in Kelvin?
(a) 0 K (b) 273.15 K
(c) 272 K (d) 373 K
(e) None of these
- Two friends Raman and Raghu measured the body temperature of Yashika. According to Raman it was 39°C and according to Raghu it was 102.2°F . If the body temperature of Yashika on Kelvin scale is 312.15 then who is correct among the following?
(a) Raghu says Yashika has fever with 39°C .
(b) Raman says Yashika has fever with 102.2°F
(c) Both Raman and Raghu are correct.
(d) Either Raman or Raghu is correct.
(e) None of these
- Boiling point of water is:
(a) 273 K (b) 373 K
(c) 112 K (d) 100 K
(e) None of these
- Temperature of a boiling solution in the kitchen can be measured by using:
(a) Clinical thermometer
(b) Barometer
(c) Lab Thermometer
(d) Speedometer
(e) None of these
- Rising of mercury in the thermometer is due to:
(a) Contraction of mercury on heating.
(b) Expansion of mercury on heating.
(c) Movement of the patient.
(d) Glass Covering of thermometer.
(e) None of these
- In the Process of convection:
(a) Transfer of molecules do not occur.
(b) Transfer of molecules occur.
(c) No medium is required.
(d) Transfer of free electrons occur.
(e) None of these
- Kink in a clinical thermometer:
(a) Do not play any role.
(b) Expands the mercury.
(c) Prevents the mercury from flowing back into the bulb just after measuring temperature.
(d) Is the main unit of measuring temperature.
(e) None of these
- Which one of the following is essential for rusting of iron?
(a) Oxygen (b) Water vapour
(c) Iron (d) All the above
(e) None of these
- 405°C is equal to ____ Fahrenheit.
(a) 273° (b) 761°
(c) 760° (d) 972°
(e) None of these
- Match the following:

Column A		Column B	
(i)	Solids	(A)	Doctor's thermometer
(ii)	Gases	(B)	Radiation
(iii)	Vacuum	(C)	Conduction
(iv)	Kink	(D)	Convection

- (i - C), (ii - D), (iii - B), (iv - A)
- (i - C), (ii - B), (iii - D), (iv - A)
- (i - C), (ii - A), (iii - D), (iv - B)
- (i - D), (ii - C), (iii - B), (iv - A)
- None of these

- 12.** Ice is covered with a jute cloth to slow the process of melting because:
 (a) It is harsh to touch.
 (b) It is a poor conductor of heat.
 (c) Ice can be wrapped in it easily.
 (d) Ice becomes light when covered with jute.
 (e) None of these
- 13.** A way of transferring heat from hot body to cold body which do not require any material medium is:
 (a) Convection (b) Conduction
 (c) Radiation (d) Reflection
 (e) None of these
- 14.** Molecules of matter on heating:
 (a) Move slower (b) Stand still
 (c) Move faster (d) Always get broken
 (e) None of these
- 15.** Some utensils of stainless steel are provided with copper bottoms because:
 (a) Copper is easy to clean.
 (b) It looks good.
 (c) Copper is a better conductor of heat than stainless steel.
 (d) All the above
 (e) None of these
- 16.** Convert -150° Celsius to Kelvin.
 (a) 123 K (b) 273 K
 (c) 274 K (d) 373 K
 (e) None of these
- 17.** Higher kinetic energy of the molecules of the body is observed when the body is at ____.
 (a) Lower temperature
 (b) Higher temperature
 (c) Very low temperature
 (d) All the above
 (e) None of these
- 18.** One litre of water at 25°C is mixed with one litre of water at 35°C . The temperature of the mixture will be:
 (a) 60°C
 (b) 50°C
 (c) Between 25°C and 35°C
 (d) More than 35°C
 (e) None of these
- 19.** Method of heat transfer by which heat is transferred from sun to earth is:
 (a) Conduction (b) Vaporization
 (c) Radiation (d) Convection
 (e) None of these
- 20.** When a ribbon of magnesium is burnt in the air, magnesium oxide is formed.
 This is an example of:
 (a) Physical change (b) Chemical change
 (c) Temporary change (d) All the above
 (e) None of these
- 21.** Original substances participating in a chemical reaction are ____ and the new substances formed are known as the ____.
 (a) Products, reactants
 (b) Catalysts, Reactants
 (c) Reactants, products
 (d) Products, Catalysts
 (e) None of these
- 22.** Gas evolving when acetic acid gets reacted with baking soda.
 (a) Hydrogen (b) Carbon dioxide
 (c) Nitrogen (d) Argon
 (e) None of these
- 23.** Burning of candle is a:
 (a) Physical Change (b) Chemical Change
 (c) Both (a) and (b) (d) Biological Change
 (e) None of these
- 24.** Name the insoluble product formed when two compounds react in their aqueous solution state.
 (a) Reactant (b) Precipitate
 (c) Catalyst (d) Water
 (e) None of these
- 25.** Which of the following is not a Combination reaction?
 (a) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
 (b) $\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3$
 (c) $\text{Ca(OH)}_2 \rightarrow \text{CaO} + \text{H}_2\text{O}$
 (d) $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$
 (e) None of these

- 26.** ____ is known as blue vitriol.
 (a) Potassium sulphate
 (b) Iron sulphate
 (c) Crystals of copper sulphate
 (d) Copper hydroxide
 (e) None of these
- 27.** Look at the following reaction and choose the correct statement.
 $\text{Ca(OH)}_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$
 (a) CO_2 Turns lime water milky.
 (b) White coloured insoluble calcium carbonate is formed.
 (c) It is a physical change.
 (d) Both (a) and (b)
 (e) None of these
- 28.** ____ is not a physical property of a substance.
 (a) Colour (b) Shape
 (c) State (d) Flammability
 (e) None of these
- 29.** Process by which salt is obtained by the evaporation of sea water.
 (a) Sublimation (b) Condensation
 (c) Galvanisation (d) Crystallisation
 (e) None of these
- 30.** NaHCO_3 is:
 (a) Washing soda (b) Baking soda
 (c) Alum (d) Rust
 (e) None of these
- 31.** Sagging of electric wires in summers is because of:
 (a) Contraction of metals on heating.
 (b) Expansion of metals on heating.
 (c) Metals remain same on heating.
 (d) Metals change their colour on heating.
 (e) None of these
- 32.** Which coloured light is produced when magnesium ribbon burns?
 (a) Yellow light (b) Red bright light
 (c) Brilliant white light (d) Black light
 (e) None of these
- 33.** ____ is produced when anaerobic bacteria digest animal waste.
 (a) Hydrogen gas
 (b) Biogas
 (c) Nitrogen gas
 (d) Sulphur dioxide gas
 (e) None of these
- 34.** Washing soda is:
 (a) Calcium carbonate
 (b) Calcium sulphate
 (c) Sodium carbonate
 (d) Sodium hydrogen carbonate
 (e) None of these
- 35.** A chemical reaction showing single displacement reaction is:
 (a) $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$
 (b) $\text{H}_2\text{SO}_4 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
 (c) $\text{AgNO}_3 + \text{Cu} \rightarrow \text{Cu(NO}_3)_2 + 2\text{Ag}$
 (d) All the above
 (e) None of these
- 36.** Rate of rusting of iron will be more in:
 (a) Deserts (b) Coastal areas
 (c) Polar regions (d) All the above
 (e) None of these
- 37.** Malleability is a property by which:
 (a) Metals can be burnt.
 (b) Metals can be stretched into wires.
 (c) Metal can be converted into thin sheets.
 (d) All the above
 (e) None of these
- 38.** Effervescence is:
 (a) Burning of paper
 (b) Melting of ice
 (c) Bubbling in liquid
 (d) Freezing of water
 (e) None of these
- 39.** Which of the following chemical reactions is endothermic?
 (a) $\text{N}_2 + \text{O}_2 \rightarrow 2\text{NO}$
 (b) $\text{C} + 2\text{S} \rightarrow \text{CS}_2$
 (c) $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$
 (d) Both (a) and (b)
 (e) None of these

- 40.** Reducing agent is that which:
- (a) Can oxidizes other substances.
 - (b) Can reduce other substances by removing oxygen.
 - (c) Can oxidizes other substances by removing hydrogen.
 - (d) Can oxidizes other substances by providing oxygen to them.
 - (e) None of these

Answers – Key

1. C	2. B	3. C	4. B	5. C
6. B	7. B	8. C	9. D	10. B
11. A	12. B	13. C	14. C	15. C
16. A	17. B	18. C	19. C	20. B
21. C	22. B	23. C	24. B	25. C
26. C	27. D	28. D	29. D	30. B
31. B	32. C	33. B	34. C	35. C
36. B	37. C	38. C	39. D	40. B