1. Which of the following elements is not a metalloid?
(a) Boron
(b) Silicon
(c) Germanium
(d) Tungsten
2. In tincture of iodine, find the solute and solvent?
(a) alcohol is the solute and iodine is the solvent
(b) iodine is the solute and alcohol is the solvent
(c) any component can be considered as solute or solvent
(d) tincture of iodine is not a solution
3. Which of the following property does not describe a compound?
(a) It is composed of two or more elements
(b) It is a pure substance.
(c) It cannot be separated into constituents by physical means
(d) It is mixed in any proportion by mass
4. Cloud is an example of
(a) liquid dispersed in a gas
(b) solid dispersed in a gas
(c) liquid dispersed in a solid
(d) solid dispersed in a solid
5. Which of the following are homogeneous in nature?

1 ice
2 wood
3 soil
4 air
(a) (1) and (3)
(b) (2) and (4)
(c) (1) and (4)
(d) (3) and (4)
10. A non-metal having lustrous appearance is.
(a) Phosphorous
(b) Iodine
(c) sulphur
(d) bromine
11. Which of the following solutions is/are not stable?
(a) True solutions
(b) Colloidal solutions
(c) Suspensions
(d) None of the above
12. Pumice stone is an example of:
(a) Gel
(b) Emulsion
(c) Foam
(d) Solid Foam
6. Which of the following will show Tyndall effect?
(a) Milk
(b) Salt solution
(c) Vinegar
(d) Sulphur in water
13. A saturated solution can be made unsaturated:
(a) Increasing temperature by heating
(b) By adding more of the solvent
(c) By adding more of the solute
(d) Both (A) and (C)
7. When iron and sulphur are heated at high temperature
(a) Black coloured FeS is formed
(b) Mixture of iron and sulphur is obtained
(c) Yellow coloured iron sulphide is formed
(d) They do not heat.
14. $20 \mathrm{~cm}^{3}$ of acetone is added into water to make total volume of $250 \mathrm{~cm}^{3}$. The percentage by volume in this solution is:
(a) $0.8 \%$
(b) $7 \%$
(c) $0.7 \%$
(d) $8.0 \%$
15. 12 grams of potassium sulphate dissolves in 75 grams of water at $60^{\circ} \mathrm{C}$. Its solubility at $60^{0} \mathrm{C}$ is:
(a) 16.0 g
(b) $1.6 g$
(c) 0.16 g
(d) 16.6 g
16. A $15 \%$ alcohol solution means
(a) 15 ml alcohol and 85 mi water
(b) 15 ml alcohol and 100 ml water
(c) 15 ml water and 85 ml alcohol
(d) Cant say anything
17. Which of the following is not an organic compound:
(a) Urea
(b) Ethanol
(c) Marble
(d) Sugar
18. False statement about mixture is
(a) Energy changes are not involved in the preparation of a mixture.
(b) Mixture have a definite melting point and boiling point.
(c) The composition of mixture is not definite
(d) A mixture show the properties of all constituents present in it
19. Which of the following is/are mixture:
(a) Solution of copper sulphate
(b) Brass and Bronze
(c) Sulphur powder
(d) Both (A) and (B)
20. Carbonated drinks contains:
(a) Carbon dioxide as a solvent.
(b) Water as a solute.
(c) Caustic soda.
(d) None of these
21. If two lines intersected by a transversal, then each pair of corresponding angles so formed is "
(a) Equal
(b) Complementary
(c) Supplementary
(d) None of these
22. Two parallel lines have :
(a) A common point
(b) Two common point
(c) No any common point
(d) Infinite common points
23. An angle is $14^{0}$ more than its complementary angle then angle is :
(a) $38^{0}$
(b) $52^{0}$
(c) $50^{0}$
(d) None of these
24. The angle between the bisectors of two adjacent supplementary angles is :
(a) Acute angle
(b) Right angle
(c) Obtuse angle
(d) None of these
25. If one angle of the triangle is equal to the sum of the other two then the triangle is :
(a) Acute a triangle
(b) Obtuse triangle
(c) Right triangle
(d) None
26. X lies in the interior of $\angle \mathrm{BAC}$. If $\angle \mathrm{BAC}=70^{\circ}$ and $\angle \mathrm{BAX}=42^{\circ}$ then $\angle \mathrm{XAC}=$
(a) $28^{0}$
(b) $29^{0}$
(c) $27^{0}$
(d) $30^{0}$
27. Two angles whose measures are $\mathrm{a} \& \mathrm{~b}$ are such that $2 \mathrm{a}-3 \mathrm{~b}=60^{\circ}$ then $\frac{4 \mathrm{a}}{5 \mathrm{~b}}=?$ if they form a linear pair:
(a) 0
(b) 8

5
(c) 1
(d)
(d) 2
28. Which one of the following statements is not false :
(a) If two angles forming a linear pair, then each of these angles is of measure $90^{\circ}$
(b) Angles forming a linear pair can both be acute angles
(c) One of the angles forming a linear pair can be obtuse angle
(d) Bisectors of the adjacent angles form a right angle
29. Which one of the following is correct:
(a) If two parallel lines are intersected by a transversal, then alternate angles are equal
(b) If two parallel lines are intersected by a transversal then sum of the interior angles on the same side of transversal is $180^{0}$
(c) If two parallel lines intersected by a transversal then corresponding angles are equal
(d) All of these
30. At 4.24 pm , how many degrees has the hour hand of a clock moved from its position at noon?
(a) $132^{0}$
(b) $135^{0}$
(c) $140^{0}$
(d) $145^{0}$
31. The sum of the exterior angles of a hexagon is -
(a) $360^{0}$
(b) $540^{0}$
(c) $720^{0}$
(d) None of these
32. The sum of all the angles of a pentagon are -
(a) $360^{0}$
(b) $540^{0}$
(c) $720^{\circ}$
(d) None of these
33. The angle that is three times as large as its comlement is -
(a) $135^{0}$
(b) $67.5^{0}$
(c) $50.5^{0}$
(d) $45^{0}$
34. In this fig QS and RS are beisectors of exterior angles Q and R . The $\angle \mathrm{QSR}+\frac{\angle \mathrm{P}}{2}$ is equal to-

(a) $270^{0}$
(b) $180^{0}$
(c) $90^{\circ}$
(d) $60^{0}$
35. The angle which exceeds its complement by $20^{\circ}$ is
(a) $45^{0}$
(b) $55^{0}$
(c) $70^{0}$
(d) $110^{0}$
36. In the figure $\mathrm{AB} \| \mathrm{CD}$, then $\angle \mathrm{EFD}$ is equal to-

(a) $20^{0}$
(b) $25^{0}$
(c) $30^{0}$
(d) $35^{0}$
37. What value of x will make AOB a straight line?

(a) $30^{0}$
(b) $50^{0}$
(c) $49^{0}$
(d) None of these
38. What value of $x$ will make $C D \| E F$, if $A B \| C D$ ?

(a) $150^{0}$
(b) $145^{0}$
(c) $140^{0}$
(d) $135^{0}$
39. The value of $\mathbf{x}$ in the following figure is-

(a) $30^{0}$
(b) $45^{0}$
(c) $60^{0}$
(d) None of these
40. Find the value of $x$ in the given figure.

(a) $30^{0}$
(b) $35^{0}$
(c) $40^{0}$
(d) $45^{0}$
41. Angle ABC in the following figure is $\mathrm{a} / \mathrm{an}$

(a) Acute angle
(b) Obtuse angle
(c) Reflex angle
(d) Straight angle
43. In the figure if $B D \| E F$, then $\angle C E F$ is -

(a) $100^{0}$
(b) $120^{0}$
(c) $140^{0}$
(d) $160^{0}$
44. In the figure $\mathrm{PQ} \| \mathrm{ST}$, then $\angle \mathrm{QRS}$ is equal to -

(a) $30^{0}$
(b) $40^{0}$
(c) $50^{0}$
(d) $60^{0}$
45. In the adjoining figure, BD and CD are angle bisectors. Then, which of the following is true?

(a) $\angle \mathrm{D}=\frac{1}{2} \angle \mathrm{~A}$
(b) $\angle \mathrm{x}+\angle \mathrm{y}=\angle \mathrm{A}+\angle \mathrm{D}$
(c)

$$
\angle \mathrm{D}=\frac{\angle \mathrm{x}+\angle \mathrm{y}}{2}
$$

(d) All of the above
46. Which of the following is true?
(i) A triangle can have two right angles.
(ii) A triangle can have all angles less than $60^{\circ}$
(iii) A triangle can have two acute angles
(a) Only (ii)
(b) Only (i)
(c) Only (iii)
(d) All are true
47. If two angles are complementary of each other, then each angle is :
(a) An Obtuse angle
(b) A Right angle
(c) An Acute angle
(d) A supplementary angle.
48. Two angles whose measures are a \& bare such that $2 a-3 b$ $=60^{\circ}$ then $5 b=$ ?, if they form a linear pair :
(a) $120^{0}$
(b) $300^{0}$
(c) $60^{\circ}$
(d) None of these
50. There are four lines in a plane no two of which are parallel. The maximum number of points in which they can intersect is
(a) 4
(b) 5
(c) 6
(d) 7
49. If two parallel lines are intersected by a transversal then the bisectors of the interior angles form a :
(a) Rhombus
(b) $\| \mathrm{gm}$
(c) Square
(d) Rectangle

## 1. Answer: d

## Solution

Tungsten
14. Answer: d
2. Answer: b

Solution
iodine is the solute and alcohol is the solvent
3. Answer: d

Solution
It is mixed in any proportion by mass.
17. Answer: c
4. Answer: d
18. Answer: b
5. Answer: d
6. Answer: a
20. Answer: d
7. Answer: a
21. Answer: d
8. Answer: a
22. Answer: c
9. Answer: c
23. Answer: b
10. Answer: b
24. Answer: b
11. Answer: c
25. Answer: c
12. Answer: d
13. Answer: $a, b$
16. Answer: a
19. Answer: d
26. Answer: a
27. Answer: b
28. Answer: c
29. Answer: d
30. Answer: a
31. Answer: a
44. Answer: a
32. Answer: $b$
45. Answer: a
33. Answer: b
34. Answer: c
47. Answer: c
35. Answer: $b$
48. Answer: b
36. Answer: c
37. Answer: b
50. Answer: c
38. Answer: $b$

