

MATTER-B (Multiple Choice)

- Which one of the following is a mixture?
A. water B. air C. Iron D. salt
- Which one is a homogeneous mixture?
A. oil+water B. chalk+water
C. sand + water D. sugar+ water
- Which one is an element?
A. salty water B. sugar
C. copper D. air
- Alcohol and water are mixed. This is an example to
A. homogeneous mixture
B. heterogeneous mixture
C. Emulsion
D. Suspension
- Which one of the following is a physical change?
A. the burning of wood
B. formation of compound
C. dissolving sugar in water
D. reaction of sodium with water
- Which one of the following is not the property of the mixtures?
A. They do not have formulas
B. They are not pure substances
C. They have the properties of matters that form themselves
D. They can be separated by chemical methods
- air
 - Sugar + salt
 - .oil + water
 - .alcohol + waterWhich one(s) of the above can be an example to homogeneous mixtures?
A. I, II, III B. I only
C. IV D. I and IV
- A metal rod is heated for a while. In this process, which of the following will change?
I. Length II. Density III. Volume
A. I only B. I and III
C. I and II D. I and II and III
- Which one is a characteristic property of matters?
A. Mass B. Volume
C. Density D. None
- Which one has a constant boiling point?

- A. salty water B. sugary water
C. copper D. None

11. Which one is the symbol of iron?
A. I B. Ir C. Fe D. F

12. K is the symbol of.....
A. Calcium B. Potassium
C. Neon D. Copper

13. What is the mass of 10 L of aluminum piece?
 $d_{Al} = 2.7 \text{ g/cm}^3$
A. 27 g B. 0.27 g
C. 27000 g D. 0.027 g

Matters	Melting P.	Boiling P.
X	-7.2	58.8
Y	5.5	80.1
Z	32.8	221

What are the physical states of x, y and z at room temperature?

	x	y	z
A.	solid	liquid	solid
B.	liquid	liquid	solid
C.	liquid	solid	liquid
D.	gas	gas	gas

15. The change form liquid into gas is called
A. condensation B. evaporation
C. Freezing D. Melting

16. Which one is not a mixture?
A. Soil B. water vapor
C. air D. milk

17. For 10 g. and 100 g. samples of water, which one(s) is (are) true ?
I. Boiling points are same
II. Densities are different
III. Volumes are same
A. I only B. I and II
C. II and III D. I and III

18. sodium + chlorine \rightarrow sodium chloride
For this reaction, Which one is wrong?

- A. table salt is explosive with water
B. chlorine is a poisonous gas
C. Elements lose their properties
D. Table salt is a pure substance

- 19 .
I. They are pure
II. They have standard boiling and melting point.

III. They are homogenous

IV. They can be decomposed into simpler parts.

Which ones of the above are wrong for elements, but true for compounds?

- A. I only B. IV only
C. III and IV D. I and IV

20 .

- I. Volume
II. Density
III. Solubility
IV. Expansion

Which ones of the above are characteristic properties of matter?

- A. I only B. II only
C. II, III and IV D. II and IV

21. Which one is the formula of acetic acid?

- A. HCl B. HNO₃ C. H₂SO₄ D. CH₃COOH

22. If oil and water are mixed, the mixture will be....

- A. homogeneous B. suspension
C. Emulsion D. None

23. Which one is a physical change?

- A. burning of wood B. rusting of iron
C. electrolysis of water D. melting of ice

24. Which ones are correct for compounds?

- I. They contain different kinds of atoms
II. Elements that form compounds keep their properties .
III. They are not separated into atoms by physical methods.
IV. Molecule is the smallest part.

- A. I only B. II only
C. I, III, IV D. I and IV

25. Which one of the following is dependent on the amount of matter?

- A. Boiling point B. Mass
C. Density D. Expansion

26.

- I. They are homogeneous
II. They have a definite boiling point.
III. They can be separated into atoms by only chemical methods.

Which ones of the above are common for compounds and salty water?

- A. III only B. II and III C. I, II and III D. I only

27. What is the mass of iron that has a volume of 10 cm³? $d_{Fe} = 7.8 \text{ g/cm}^3$

- A. 7.8 g B. 78 g C. 0.78 g D. 7800 g

28- Substances m.p (°C) b.p (°C)

x	40	142
y	-4	110
z	12	130

At room temperature , what are the physical states of x,y, and z?

X y z

- A. solid liquid gas
B. gas gas solid
C. liquid solid liquid
D. solid liquid liquid

29. Which one does not conduct electricity?

- A. Cu B. Fe C. Na D. S

30. Which one is a homogeneous mixture ?

- A. salt B. seawater
C. air D. chalk + water

31.

I. Compound = Carbondioxide

II. Mixture = Air

III. Element = water

Which examples are given correctly?

- A. I only B. I and II
C. I and III D. II and III

32. The change from gas into liquid is called

- A. condensation B. evaporation
C. Freezing D. Melting

33. Which one is the symbol of iodine?

- A. I B. Ir C. Fe D. F

34. Which one has a constant boiling point?

- A. salty water B. sugar solution
C. oxygen D. wood

35. Which one is not a mixture?

- A. Soil B. water vapor
C. air D. milk

36. Which one does not contain the same kinds of atoms or molecules?

- A. sodium chloride B. Water
C. air D. hydrogen

Given the substances; iron, carbon, HCl, salty water, and oil+ water. Answer the following questions.

(37- 42)

37. Which ones are uniform?

- A. Fe, C B. HCl C. Oil + water
D. salty water E. Fe,C,HCl,salty water

38. Which ones can be separated into simpler parts by physical methods?

- A. salty water, oil+water
- B. Fe,C C. HCl
- C. oil+water
- D. E. HCl, salty water, oil+water

39 Which ones cannot be separated into simpler parts and do not conduct electricity?

- A. Fe B. C C. Fe,C
- D. HCl, C E. oil+water

40. Which ones do not have a definite boiling point?

- A. Fe, C B. HCl C. Fe, C, HCl
- D. salty water,oil+water E. none

41. Which ones show different properties from their components?

- A. salty water B. oil+water C. HCl
- D. salty water,oil + water E. Fe, C

42. Which ones do not have a fixed ratio between their atoms?

- A. salty water B. Oil + water C. HCl
- D. salty water,oil+water E. Fe, C

43. Which one of the following is not a chemical change?

- A. sodium reacting vigorously with water
- B. hydrogen burning in air
- C. rusting of a car body
- D. melting of sulphur
- E. phosphorous igniting spontaneously in air

44. Which is characteristic of a compound?

- A. It can consist of a single element
- B. It is heterogeneous
- C. Its chemical composition can be varied
- D. It can be decomposed by a physical change
- E. It can be decomposed by a chemical change

45. Select the situation which involves a chemical change

- A. a solid dissolving in water
- B. ice changing to water
- C. a candle burning
- D. distillation of water
- E. separation of air into oxygen, nitrogen, and carbondioxide

46. A solid substance, A is dissolved in liquid B. A and B are referred to respectively as;

- A. solution and solvent
- B. solvent and solute

- C. solute and solution
- D. solvent and solution
- E. solute and solvent

47. Which one of the following can be correctly described as a physical change?

- A. electrolysis of water
- B. burning of a piece of paper
- C. dissolving of sugar in water
- D. rusting of an iron bar
- E. explosion of a gasoline-air mixture

48. A mixture of olive oil and water can best be separated by

- A. evaporation
- B. Distillation
- C. filtration
- D. fractional distillation
- E. using a separatory funnel

49. A mixture of sand and salt can be separated on the basis of the difference in their;

- A. boiling point B. melting point
- C. solubility D. density
- E. particle size

50. The separation of ethyl alcohol and water takes place by the process of

- A. sublimation B. evaporation
- C. filtration D. condensation
- E. fractional distillation

51. Which one(s) of the following is (are) physical properties?

- I. sugar dissolves in water
- II. silver is a soft metal
- III. hydrogen burns when ignited.
- IV. copper is a good conductor of electricity.

- A. I only B. II and III C. III only
- D. II, III and IV E. I, II, IV

52. Which of the following statements are always true in defining mixtures?

- I. mixtures are heterogeneous
- II. mixtures are separated by physical means
- III. mixtures are made up of elements
- IV. components of mixtures are in fixed mass ratios.
- V. The substances in a mixture keep their chemical properties.

- A. I and IV B. II and IV C. I, III and V
- D. II and IV-V E. II and V