MATTER-A

1.

Substances	m.p (^{0}C)	b.p (^{0}C)
x	40	142
y	-4	110
z	12	130

A. At room temperature (25^{0}C) , what are the physical states of x, y, and z?
B. Can X be a mixture? Why?

2. Fill in the blanks.

Symbol or formula	name
Ca	……
HCl	……
…….	Acetic acid
…….	Sulphuric acid

3. You want to measure the density of stone. You measured its mass as 125 g. When you put it into a beaker that has 100 ml. of water, volume increases to 150 ml.

A. What is the density of stone?
B. stone + water mixture can be an example to …
C. Why does not stone float on water?

4. Once, you went on picnic. And you decided to prepare tea. You heated water and it started to boil at 96 ^{0}C. Why did not it boil at 100^{0}C?

5. Hydrogen can be burned. And oxygen helps burning. But the compound water cannot be burned and does not help burning. Why?

6. What is the mass of 4 m^3 of water? d_{water}=1 g/ml)

7. For Fe, S, salty water and oil +water, answer the following questions.
A. Which ones are homogeneous?
.....
B. Which ones are pure?
.....
C. Which ones do not have a definite boiling point?
.....
D. Which one is not uniform?
.....
E. Which one has no mass .....

8. Classify the following as homogeneous or heterogeneous.
A. sand + water
B. air
C. salt – sugar
D. alcohol – water

9. Wood and stone do not have standard (constant) boiling and melting points. What can the reason be? Explain

10. Fill in the blanks

	Name	**Symbol**
A.	Iron	.....
B.	Sodium	.....
C.	Silver	.....
D.	.....	P
E.	.....	Cu
F.	.....	Si

11. In a laboratory, If your teacher gives you a test tube in which there is an unknown liquid, suggest a method to understand whether this liquid is a pure substance or not?

12. Fill in the blanks.
A. water boils at 100^{0}C or ……K.
B. The change from solid into gas is called ……
C. The color of gaseous iodine is ……..
D. 1 m^3 is equal to …… ml.
E. A good example of suspension is ……

13. How can you separate the mixtures of
A. oil-water b) sand-water c) sand – sugar
B. alcohol-water e) iron powder- sugar

14. Give 10 metals and nonmetals with their symbols and names.

15. Determine the following changes whether they are physical or chemical.

A. melting of ice b) rusting of iron
B. burning of paper d) formation of snow
C. cutting of wood f) digestion of food

16. Find the results of the following calculations in the desired units.

A. 400 K – 27 ^{0}C=.....^{0}C
B. –30 ^{0}C + 250 K=.....K
C.27 ml + 23 cm^3 =.....L
D. 20 dm^3 + 20 L=.....ml
E. 1 kg + 1000 g=.....kg
F. 1 g + 1000 mg=.....kg