Miscible and Immiscible Liquids

A. Choose the Correct Answer:

1. What are miscible liquids?

- A) Liquids that do not mix with each other
- B) Liquids that completely mix to form a single layer
- C) Liquids that turn into solids
- D) Liquids that evaporate quickly

2. Which of the following is an example of miscible liquids?

- A) Water and oil
- B) Water and honey
- C) Water and vinegar
- D) Oil and kerosene

3. What happens when immiscible liquids are mixed?

- A) They form a single layer
- B) They completely dissolve in each other
- C) They form separate layers
- D) They evaporate immediately

B. Fill in the Blanks:

1.	Liquids that mix completely with each other	are called	liquids.
2.	Water and oil are examples of I	iquids.	
3.	When two immiscible liquids are mixed, the	y form	layers.

C. Case Study:

Ananya performed an experiment with different liquids.

- She mixed water and vinegar in one beaker. The liquids mixed completely, forming a single layer.
- In another beaker, she mixed water and oil. The oil floated on top, creating two separate layers.
- Her teacher explained that the first pair of liquids were miscible, while the second pair were immiscible.

Case Study Questions:

- 1. Which pair of liquids were miscible in Ananya's experiment?
- 2. Why did the oil float on top of the water?

- 3. What happens when two immiscible liquids are mixed?
- 4. What term is used for liquids that form a single layer when mixed?

D. Short Answer Questions:

- 1. What are miscible liquids? Give an example.
- 2. What are immiscible liquids? Give an example.
- 3. Why do immiscible liquids form separate layers?

E. Long Answer Questions:

- 1. Explain the difference between miscible and immiscible liquids with examples.
- 2. Why do some liquids mix completely while others do not? Describe the factors affecting liquid mixing.
- 3. How can you separate two immiscible liquids? Explain the process in detail.