



Consider the following substances:

- I. Ethanol
- II. Nitroglycerine
- III. Urea

Coal gasification technology can be used in the production of how many of them?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None

Answer: (b) Only two

Explanation:

Ethanol - Yes, coal gasification produces syngas ($\text{CO} + \text{H}_2$), which can be used to synthesize ethanol via fermentation or chemical routes.



Nitroglycerine – No, coal gasification is not used in its synthesis; nitroglycerine is made from glycerol and nitric acid, not from coal-derived products.

Urea – Yes, coal gasification provides ammonia (via syngas \rightarrow NH_3), which combines with CO_2 to produce urea.