26 What is **not** an **essential** condition for an observable interference pattern to occur between the waves from two sources?

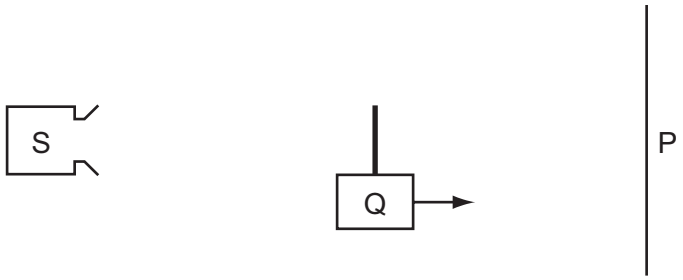
A The frequencies of the two sources must be equal.

B The sources must be coherent.

C The sources must emit waves of equal amplitude.

D The waves from the two sources must overlap.

27 Source S emits microwaves with a constant amplitude. The microwaves hit a metal screen P and are reflected. A stationary wave is formed between S and P. The wavelength of the microwaves is much smaller than the distance between S and P.



A detector Q is moved at a slow, constant speed from S to P.

What happens to the amplitude of the signal detected by Q?

A decreases steadily

B increases and decreases regularly

C increases steadily

D remains constant