

Max. Marks: 4

Questions: 1

Q.1 Three identical coils C_1 , C_2 and C_3 are closely placed such that they share a common axis. C_2 is exactly midway. C_1 carries current I in anti-clockwise direction while C_3 carries current I in clockwise direction. An induced current flows through C_2 will be in clockwise direction when

- (1) C_1 and C_3 move with equal speeds away from C_2
- (2) C_1 moves towards C_2 and C_3 moves away from C_2
- (3) C_1 and C_3 move with equal speeds towards C_2
- (4) C_1 moves away from C_2 and C_3 moves towards C_2

[illegible]