

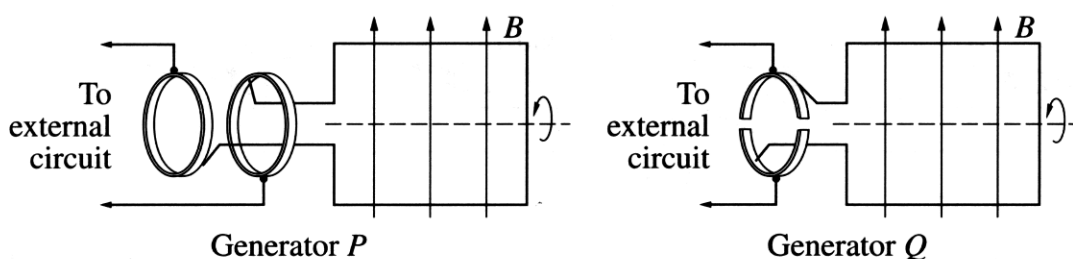
Physics

Section I – Part B (continued)

Marks

Question 22 (6 marks)

Two types of generator are shown in the diagram.



- (a) What is the function of the brush in a generator? 1

*the function of the brush is to maintain contact with the rings*

- (b) Which of these generators is a DC generator? Justify your choice. 3

*Generator Q is a DC generator because it has a split ring commutator where as generator P is an AC generator because it has 2 slip rings. The split ring is needed to ensure there is a constant flow of current in the same direction.*

- (c) Outline why AC generators are used in large-scale electrical power production. 2

*Because they are more efficient then DC generators and less complex. and also majority of the power supply is AC so it is more common to use an AC generator than a DC.*