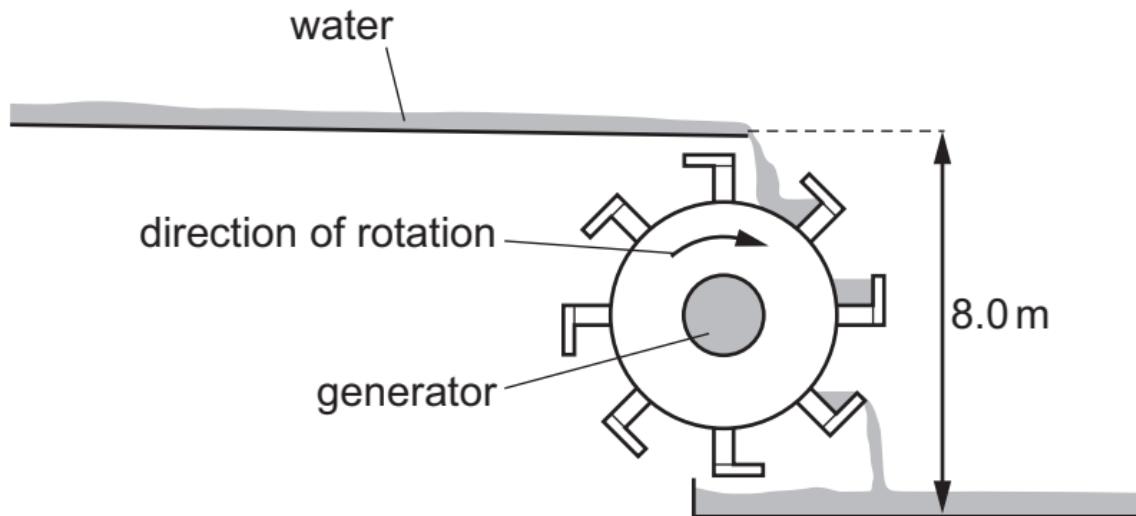


- 19 The diagram shows the design of a water wheel which drives a generator to produce electrical power. The flow rate of the water is  $200\text{ kg s}^{-1}$ . The generator supplies a current of 32A at a voltage of 230 V.



Ignoring any changes in kinetic energy of the water, what is the efficiency of the system?

- A 14%
- B 16%
- C 22%
- D 47%

- 20 The diagram shows the force-extension graph for a sample of material. The sample is stretched