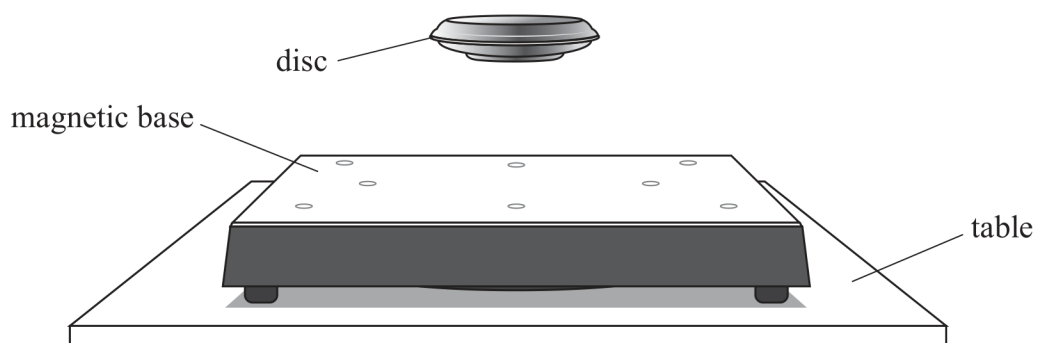


## SECTION B

Answer ALL questions in the spaces provided.

- 11 A disc of mass  $m$  is held stationary by a force  $F$  exerted by a magnetic base, as shown.



- (a) The free-body force diagram for the disc is shown below.



The two forces shown are equal in magnitude and opposite in direction.

Give two reasons why these forces are **not** a Newton's 3rd law pair.

(2)

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(b) The magnetic base has weight  $W$  and rests on a horizontal table.

Complete the free-body force diagram below for the magnetic base.

(2)



(Total for Question 11 = 4 marks)