INSTRUCTIONS

• The Question Paper will be found inside the Printed Answer Booklet.
• Use black ink. HB pencil may be used for graphs and diagrams only.
• Answer all the questions.
• Write your answer to each question in the space provided in the Printed Answer Booklet. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
• You are permitted to use a scientific or graphical calculator in this paper.
• Final answers should be given to a degree of accuracy appropriate to the context.
• The acceleration due to gravity is denoted by \( g \) m s\(^{-2}\). Unless otherwise instructed, when a numerical value is needed, use \( g = 9.8 \).

INFORMATION

• You are advised that an answer may receive no marks unless you show sufficient detail of the working to indicate that a correct method is used. You should communicate your method with correct reasoning.
• The Printed Answer Booklet consists of 12 pages. The Question Paper consists of 8 pages.
6 (a)

Force diagram

25000g

6 (b)

6 (c)