

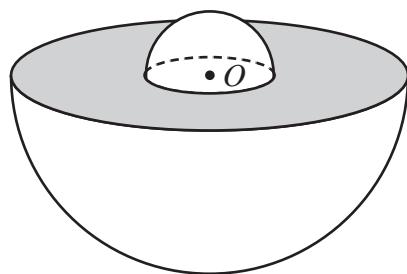
21

Diagram **NOT**
accurately drawn

The diagram shows a solid shape made by joining a large hemisphere and a small hemisphere.

The centre of the base of the large hemisphere and the centre of the base of the small hemisphere meet at the point O

radius of large hemisphere : radius of small hemisphere = 3 : 1

The total surface area of the solid shape is $567\pi \text{ cm}^2$

Calculate the total volume, in cm^3 to 3 significant figures, of the solid shape.

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..... cm³

(Total for Question 21 is 5 marks)

Turn over for Question 22



P 7 3 4 9 5 A 0 1 7 2 4