1 An advertisement for a National Car Museum is to include an illustration of an old car shown in the sketch to the right. Complete the full size drawing of the illustration below by:

(a) drawing the other wheel;

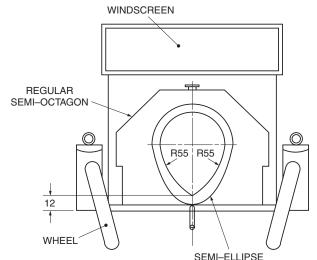
[5] (b) drawing the semi-octagon;

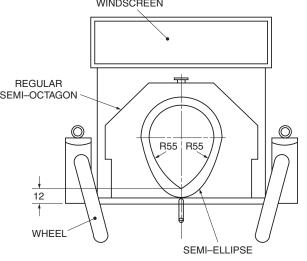
(c) constructing the semi-ellipse;

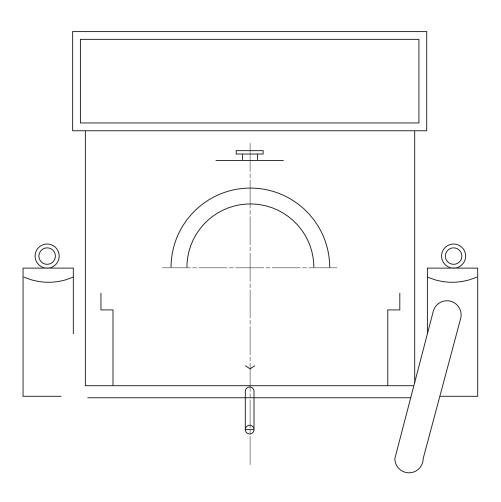
(d) constructing the two inner arcs of the radiator;

(e) drawing the letters ${\bf N} \ {\bf C} \ {\bf M}$ in a suitable style on the windscreen of the car; [7]

(f) colouring part (e) only. [3]







2 An exploded pictorial drawing of a tensioner for a wire fence is given to the right. The reel fits through the 26 mm and 15 mm diameter holes in the body so that the shoulder A of the reel is in contact with the surface **B** of the body.

(a) Draw to scale of 1:1, in either first or third angle orthographic projection, the following views of the two parts assembled:

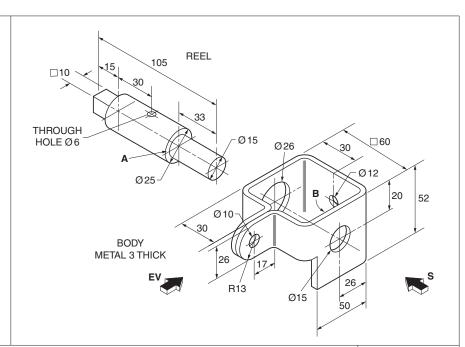
(i) a sectional view taken through the centre of the body looking in the direction of the arrow S;

(ii) the end view looking in the direction of the arrow EV;

(iii) the plan.

Hidden detail is not required in any view. Dimensions not shown are left for you to decide.

(b) In the space indicated, draw the symbol for the angle of projection you have used for your drawing.



DRAW THE SYMBOL FOR THE ANGLE OF PROJECTION USED HERE.

[Turn over

International General Certificate of Secondary Education UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

DESIGN AND TECHNOLOGY

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PAPER 2 Communication MAY/JUNE 2004

1 hour SP (CW) S61493/4 TIME 1 hour

Write your surname, other names, Centre number and candidate number in the spaces provided.

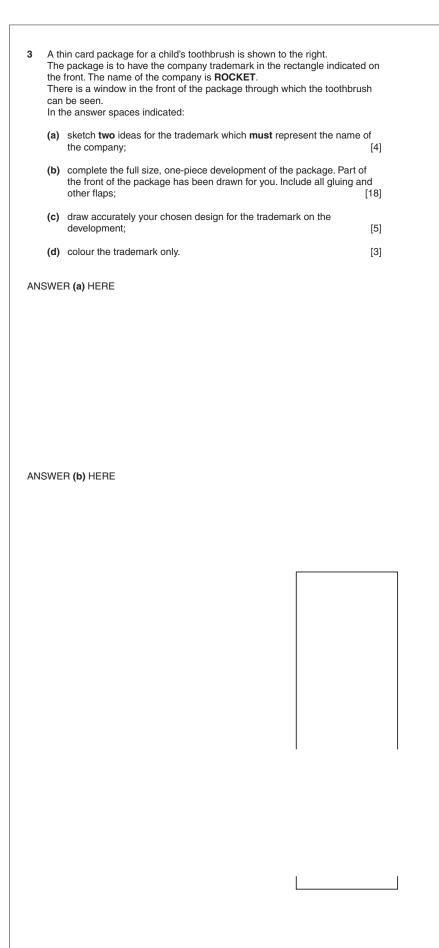
Answer any two questions.

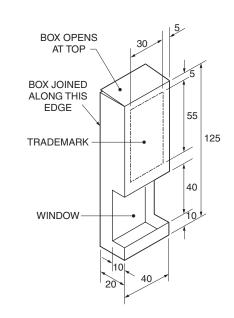
Draw your answers in the spaces provided on the question paper.

All dimensions are in millimetres.

The number of marks is given in brackets [] at the end of each question or part question.

Candidate's Surname	Examiner use	
Carlanate 9 Garrianne		
Other Names		
Centre Number		
Candidate's Number		





Orthographic views of the parts of a torch are given. A photograph of a similar torch is also given. The photograph is intended to show the assembly of the parts of the torch; details and sizes must be taken from the orthographic drawings.

The torch is to be sold with an instruction leaflet showing how the torch is taken apart, so that either new batteries or a new bulb can be fitted.

Note: The bulb fits in the bulb holder and the bulb holder fits in the 24 mm recess in the casing.

The reflector clips in the casing with the lugs L in the sockets S of the plastics ring T.

In the space below, **sketch freehand**, approximately half full size an **exploded isometric** view of the torch with the reflector to the front. Although two batteries are used in the torch, show only one in your answer.

Detail should be shown simply and clearly.



