## Stereochemistry 2011-2012 EXAM-STYLE QUESTION

## NB. 'Half a question' (out of 12.5 marks)

Answer part (a) and **EITHER** part (b) **OR** part (c) of this question.

(a) Assign (R) or (S) absolute stereochemical descriptors to all stereogenic centres in the following three molecules. Show your working.

$$CO_2H$$
  $Ph$   $Et \oplus$   $Br^{\bigcirc}$   $Et \oplus$   $CO_2H$   $Et \oplus$   $Et \oplus$ 

(b) Only one of the following molecules has an asymmetric enantiomeric form. Draw this enantiomer.

(c) Only one of the following molecules is a *meso* compound. Which is it and why?