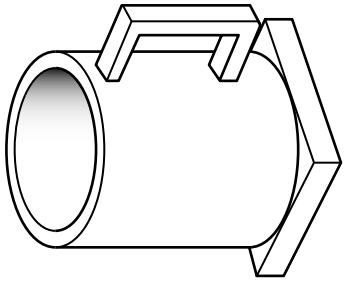


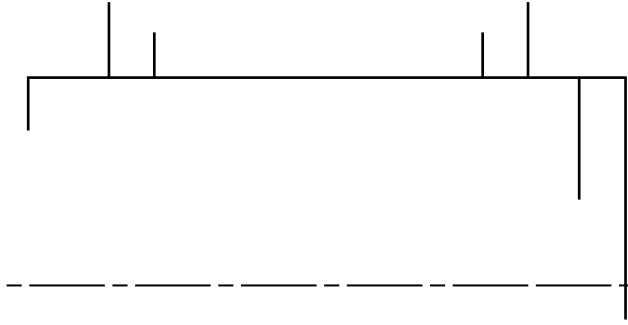
**Section A**  
Answer all questions in this section.

A sketch of a coffee mug with a square base is shown on the right.

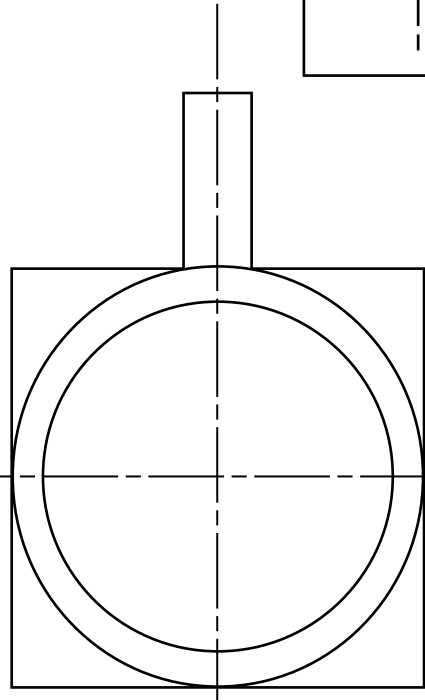


**A1 (a)** Complete the scale 1 : 2 orthographic views of the coffee mug by:

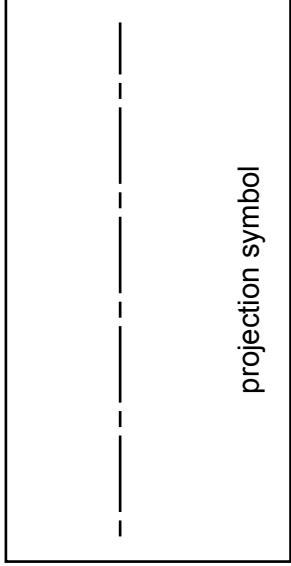
- (i) adding the missing lines to the side view; [5]
- (ii) adding one dimension to the plan; [2]
- (iii) adding the projection symbol in the given box. [3]



side view



plan



**0445/21** May/June 2015 **1 hour**  
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Centre Number .....

Candidate Number .....

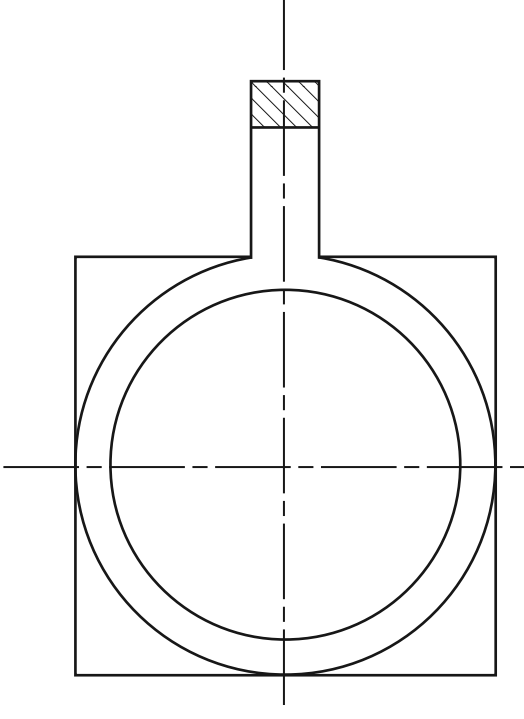
Candidate Surname .....

Other Names .....

[Turn over

**A2 (a)** Complete the sectional plan view of the coffee mug below.

[2]



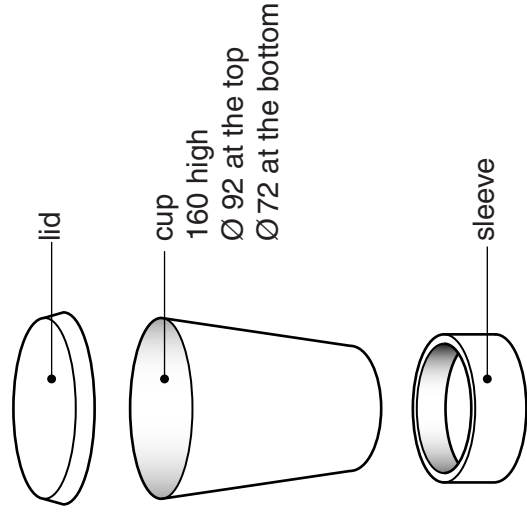
**(b)** A design is printed on the coffee mug in thermochromic ink. Describe how the thermochromic ink adds interest to the coffee mug.

- .....
- .....
- .....
- .....
- .....

[2]

For  
Examiner's  
use


**A3** An exploded view of a take away coffee cup is shown below.



**(a)** In the space below draw a scale 1 : 2 planometric view of the cup.  
Do not include the lid or sleeve.

[4]

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**(b)** The lid of the coffee cup is vacuum formed. Describe **three** main steps in the process of vacuum forming.

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..... [3]

**(c)** The sleeve is made from corrugated card.

**(i)** In the space below draw a sectional view of corrugated card. [2]

**(ii)** Explain why corrugated card is used for the sleeve.

.....

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..... [2]

