



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2017/2018**

COURSE NAME : PACKAGING GLASS AND METAL
COURSE CODE : BNK30203
PROGRAMME CODE : BNK
EXAMINATION DATE : DECEMBER 2017 / JANUARY 2018
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWERS ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

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- Q3** (a) Categories the properties of metal and non-metal used in packaging industries. (5 marks)
- (b) Develop the manufacturing processes for **TWO (2)** types of metal below as a packaging material. Shows the schematic flow process to support your answer.
- (i) Steel or Iron (10 marks)
- (ii) Aluminum (10 marks)
- Q4** (a) Many metal packaging material coated on one or both side. Propose the external and internal coating for metal. (6 marks)
- (b) Differentiate 1-piece cans and 3-piece cans (draw and redraw). (4 marks)
- (c) **Figure Q4(c)** show 2-piece beverage can. Develop step by step diagram of metal forming process metal forming process used to manufacture the 2 piece beverage can. (15 marks)

- END OF QUESTION -

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COURSE : GLASS AND METAL PACKAGING

PROGRAMME : BNK
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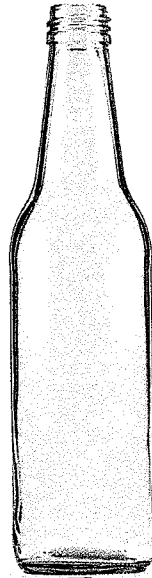


Figure Q2(b)



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Figure Q4(c)