



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
(ONLINE)  
SEMESTER II  
SESSION 2019/2020**

COURSE NAME : WELDING PRODUCT TESTING  
COURSE CODE : BBW 30202  
PROGRAM : BBD  
DATE : JUNE/JULY 2020  
DURATION : 1 HOUR 15 MINUTES  
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PRINTED PAGES

**CONFIDENTIAL**

**TERBUKA**

- Q1**
- (a) State the basic procedure for conducting microstructure examination on a welding product. (4 marks)
  - (b) List down three (3) types of bend test that can be used to test the properties of a welding product. (3 marks)
  - (c) What are the three (3) differences between Charpy test and Izod test? (6 marks)
  - (d) Mr Brown works as a welding inspector in Weldcom Pvt. Ltd. He sometimes performs tensile test to see if the products have met the required quality.
    - (i) Explain the procedures taken by Mr Brown to perform the tensile test. (9 marks)
    - (ii) State two (2) types of properties can be examined using tensile test. (3 marks)

- Q2**
- (a) State three (3) answers related to Non-Destructive Test (NDT) for questions as follows:
    - (i) What are the uses of NDT?
    - (ii) What are the reasons for using NDT?
    - (iii) When are NDT used? (9 marks)

(b) Figure Q2(b) illustrates a type of defect in a welding product.

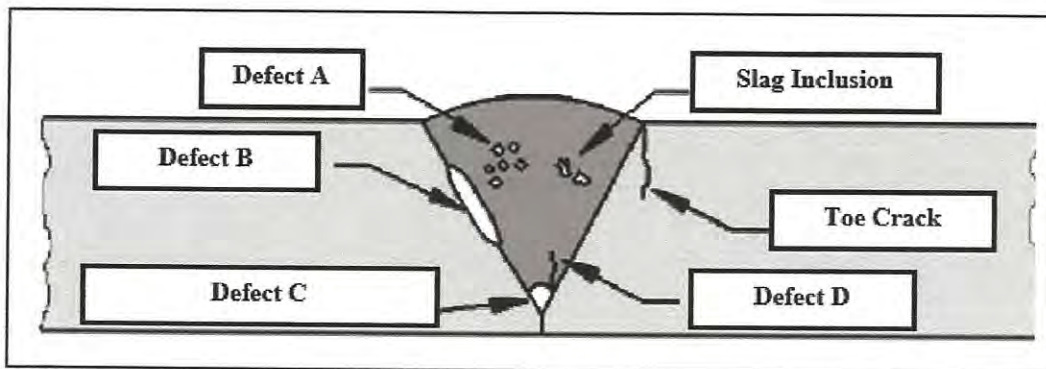


Figure Q2(b): Front view of cross-section

- (i) What are the defects indicated in A, B, C and D as shown in Figure Q2(b)? (4 marks)
- (ii) Suggest a test to detect the defect B. Give a reason for your suggestion. (4 marks)

- (iii) State four (4) advantages of the suggested test. (4 marks)
- (iv) Is it possible to detect the defect **D** using dye penetrant test? Justify your answer. (4 marks)

- END OF QUESTIONS -