



**UNIVERSITI KUALA LUMPUR  
Malaysia France Institute**

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**FINAL EXAMINATION  
SEPTEMBER 2014 SESSION**

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**SUBJECT CODE** : FWB45203  
**SUBJECT TITLE** : INTRODUCTION TO UNDERWATER WELDING  
**LEVEL** : BACHELOR  
**TIME / DURATION** : 9.00 AM – 11.30 AM  
( 2.5 HOURS )  
**DATE** : 31 DECEMBER 2014

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**INSTRUCTIONS TO CANDIDATES**

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1. Please read the instructions given in the question paper **CAREFULLY**.
  2. This question paper is printed on both sides of the paper.
  3. Please write your answers on the answer booklet provided.
  4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
  5. This question paper consists of **TWO (2)** sections. Answer all questions in Section A and Section B.
  6. Answer all questions in English.
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**THERE ARE 2 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.**

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**SECTION A (Total: 40 marks)**

**INSTRUCTION: Answers All Questions.**

**Questions 1**

Underwater welding or wet welding can be performed in two ways:

1.1 Explain briefly what you know about wet welding (5 marks)

1.2 Explain briefly what you know about dry welding (5 marks)

**Questions 2**

List down the applications of underwater welding. (10 marks)

**Questions 3**

Wet welding offers many distinct operating advantages when compared to other methods of underwater welding.

List down the advantages. (10 marks)

**Questions 4**

Explain briefly on the hyperbaric welding process. (10 marks)

**SECTION B (Total: 60 marks)****ANSWER ALL QUESTIONS.****Question 1**

Shielded metal arc welding can be performed underwater:

1.1 What are the capabilities of Shielded Metal Arc Welding used in underwater welding?  
(10 marks)

1.2 What are the limitations of Shielded Metal Arc Welding used in underwater welding?  
(10 marks)

**Question 2**

Arc welding and burning can be performed underwater:

2.1 Explain briefly on the Exothermic rod used for underwater welding and burning.  
(10 marks)

2.1 Why the power source is automatically switched-off once the arc is established?  
(10 marks)

**Question 3**

Explain the choice of polarity in underwater welding in regards to the arc stability.  
(20 marks)

**END OF QUESTION**