**CS2100 Assignment 2 Answer Book**

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| **Tutorial Group Number:** | 41 |

After completion, save this file as AxxxxxxxY.pdf and submit on Canvas together with your code as per the instructions given in the question paper.

If you do not fill your particulars above, or do not follow the submission instructions you will forfeit up to 3 marks.

Submission information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ / 3

**Part A**

**Question 1.** (7 MARKS)

(Use the space to describe the working/thinking behind your code. Think of it as your “working”. Marks will be deducted for failure to do so, or simple answers like “Go see the code yourself!” This applies for Questions 1 to 3.)

(a) (3 marks)

(b) (4 marks)

Q1 Total: \_\_\_\_\_\_\_\_\_ / 7

**Question 2.** (10 MARKS)

(a) (3 marks)

(b) (3 marks)

(c) (4 marks)

Q2 Total: \_\_\_\_\_\_\_\_\_ / 10

**Question 3.** (10 MARKS)

Q3 Total: \_\_\_\_\_\_\_\_\_ / 10

**Part B**

**Question 4.** (10 MARKS)

You are expected to show working for each of the questions, not merely the final result. Marks may be deducted for failure to do so. Expand on the space as required.

4a. Draw your logic diagram neatly below. (2 marks)

4b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 mark)

4c. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 mark)

4d. Prime implicants: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 mark)

4e. Essential prime implicants: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 mark)

4f. Simplified POS for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (2 marks)

4g. Simplified SOP for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (2 marks)

Q4 Total: \_\_\_\_\_\_\_\_\_ / 10

**Total Marks:** \_\_\_\_\_\_\_\_\_\_\_\_\_ / 40 (To be filled by TA only)

=== END OF PAPER ===