CONFIDENTIAL

MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

FINAL EXAMINATION

JANUARY 2016 SEMESTER

SUBJECT CODE	:	ISB 41303
SUBJECT TITLE	:	SOFTWARE TESTING
LEVEL	:	BACHELOR
TIME / DURATION	:	2.00 pm – 4.30 pm (2 ½ HOURS)
DATE	:	22 MAY 2016

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consists of TWO (2) sections. Section A and B.
4. Answer ALL questions in Section A and Section B.
5. Please write your answers on the answer booklet provided.
6. Answer all questions in English.

THERE ARE 3 PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 40 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

Question 1

Explain the seven principles of testing.

(14 marks)

Question 2

ISTQB has defined a fundamental test process consisting of five main activities. Discuss the five test activities and its respective tasks.

(10 marks)

Question 3

Describe five advantages of using static testing techniques on software work products.

(10 marks)

Question 4

List six typical factors considered in deciding exit criteria.

(6 marks)

SECTION B (Total: 60 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

Question 1

Identify the appropriate equivalence partitions and boundary value analysis needed to test the calculation of the bonus based on the description below.

Company SilverTech is giving their employees a bonus which will be based on the employee's length of service in the company. Employees who have been with the company for less than two years will not receive any bonus. Employees with two and more years but less than five years' service will receive RM300 bonus. RM500 is bonus given for employees with service for five to ten years, and RM 800 bonus for service more than ten years. The system will not allow a negative value to be input, but it will allow a zero to be input.

(20 marks)

Question 2

A and B are positive integer values.

1. Read A
2. Read B
3. IF (A * B > 50) THEN
4. Display "Large"
5. END IF
6. IF A > 50 THEN
7. Display " A is Large"
8. End IF

Based on the algorithm segment above, draw a flow chart and identify all possible test path needed for 100% statement coverage and 100% decision coverage.

(20 marks)

Question 3

A meeting room booking system is based on the number of meeting participants and room's availability.

If numbers of participants are more than the room's capacity, the message "No suitable room is available" will be displayed.

If number of participants are less than or equal to room capacity, the system will check and display the list of rooms available and user can book a room.

Based on the requirements described above, create the decision table.

(20 marks)

END OF QUESTION