

# **FACULTY OF COMPUTING AND INFORMATICS**

# DEPARTMENT OF COMPUTER SCIENCE

QUALIFICATION: BACHELOR OF COMPUTER SCIENCE HONOURS (SOFTWARE DEVELOPMENT)	
QUALIFICATION CODE: 08BCSH	LEVEL: 8
COURSE: Advanced Software Development	COURSE CODE: ASD810S
DATE: June 2019	PAPER: THEORY
DURATION: 2 Hours	MARKS: 80

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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# THIS QUESTION PAPER CONSISTS OF 2 PAGES

(Excluding this front page)

### **INSTRUCTIONS**

- 1. Answer ALL the questions on the answer scripts.
- 2. Write clearly and neatly.
- 3. Number the answers clearly.

# **PERMISSIBLE MATERIALS**

1. None.

(1) Discuss how you used any project management tool and the version control system to modify the open source project that you have selected.

[10 Marks]

(2) Imagine that one of your teammates have accidentally deleted a branch, and has already pushed the changes to the central git repository. There are no other git repositories, and none of your other teammates had a local copy. How would you recover this branch?

[5 Marks]

(3) Briefly discuss what you have implemented in your open source project and how you or could have better resolved the issues that you encountered.

[15 Marks]

(4) Discuss how the Model-View-Controller framework could have been or was implemented in your open source project.

[15 Marks]

- (5) Do you agree that effective communication is equally essential as coding in software development? Discuss how to effectively communicate considering all possible implications of the modes of communication.

  [10 Marks]
- (6) How did you handle poor communication in your collaborative software development project? [10 Marks]
- (7) Discuss at least three emerging software development processes such as agile, open source, crowdsourcing, and lean, and any other. [15 Marks]