

Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Computer Science and Technology
200 level 2nd Semester Examination – Dec.-2018/Jan.-2019
CST243-3 Rapid Application Development



Instructions to candidates

This paper consists of three (03) parts; Part A (MCQ), Part B (Essay) and Part C (Practical)

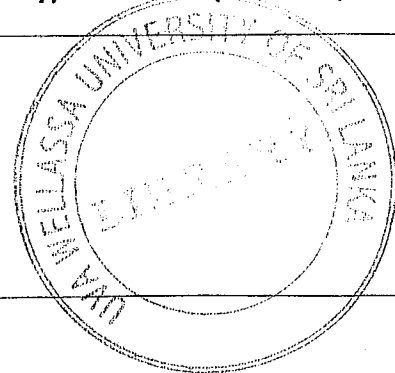
Part B

Duration: One (01) hour

Number of questions: Two (02)

Answer all the questions

Mark allocation: 30



1.
 - a.
 - i. Write two (02) characteristics of Rapid Application Development (RAD) process. (1 mark)
 - ii. Briefly explain the term iterative development. (2 mark)
 - iii. **Prototyping** and **time boxing** are two (02) core elements in RAD process. Explain the terms briefly. (4 mark)
 - b. Explain the difference between **Localization** and **Internationalization**. (2 mark)
 - c. The following Java statements are appeared in a localized application. Assume that the properties file is located in 'locq' package.

```
Locale loc = new Locale("si", "LK");  
ResourceBundle res = ResourceBundle.getBundle("locq/bundle", loc);  
String greeting = res.getString("message");  
System.out.println(greeting);
```

- i. What is **message** appeared in the third line? (2 mark)
 - ii. Explain the four (04) lines in the given Java code. (4 mark)
2.
 - a.
 - i. Why developers move from Java Servlets to Java Server Pages (JSPs)? (2 mark)
 - ii. Java Server Pages (JSPs) eventually are compiled into Java Servlets. Explain how it happens using JSPs execution process. (3 mark)

- b. "UTF-8 is the best encoding method when dealing with large amount of Sinhala/Tamil characters." State whether this statement is true or false. Justify your answer. (4 mark)
- c. Explain how prepared statements can be used to prevent SQL injection attacks. (3 mark)
- d. Briefly explain the 3A's in unit testing. (3 mark)