

# **Tutorial Letter 201/1/2020**

## **Advanced Systems Development (Information Systems) INF3705**

### **Semester 1**

### **ASSIGNMENT 01**

### **School of Computing**

**IMPORTANT INFORMATION:**

Please activate your *myUnisa* and *myLife* email addresses and ensure you have regular access to the *myUnisa* module site as well as your group site.

**Semester 1: Assignment 01****[For first semester students only]****Total: 100**

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**Question 1 [20 marks]**

Critically discuss the benefits of software re-use and explain the problem associated with this approach?

**Question 2 [10 marks]**

Suggest why it is important to make a distinction between developing the user requirements and developing system requirements in the requirement engineering process?

**Question 3 [10 marks]**

Briefly describe the three (3) types of software maintenance and explain why it is sometimes difficult to distinguish between them?

**Question 4 [12 marks]**

Apart from challenges of heterogeneity, social changes, trust and security, identify six (6) other problems and challenges that software engineering is likely to face in the 21<sup>st</sup> century?

**Question 5 [08 marks]**

Explain why design conflict might arise when designing an architecture for which both availability and security requirements are the most important non-functional requirement?

**Question 6 [12 marks]**

Explain in details what is release testing and what is user testing, explain the difference between release testing and user testing?

**Question 7 [8 marks]**

List and explain the key stages in the process of system construction by composition?

**Question 8 [20 marks]**

Looking at your community and using your own example, what system need to be developed to be to the benefits of the community that you are living in? Explain in details?