

# **FACULTY OF SCIENCE**

## ACADEMY OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING

MODULE IT00300/IT08X30

SOFTWARE FACTORIES

CAMPUS APK

EXAM DECEMBER 2014 SUPPLEMENTARY EXAM

**DATE:** December 2014 **SESSION:** 8:30 – 10:30

ASSESSOR(S) Prof JJ Langerman

(Standard Bank)

**INTERNAL MODERATOR** 

**EXTERNAL MODERATOR** Prof AC Leonard (UP)

**DURATION:** 2 Hours **MARKS:** 100

#### THIS PAPER CONSISTS OF 2 PAGES INCLUDING THE COVER PAGE

## **INSTRUCTIONS:**

- 1. Answer <u>ALL</u> the questions.
- 2. Write neatly and legibly.
- 3. Read the questions thoroughly.
- 4. Ensure that all questions are clearly marked on the answer sheet.

### Question 1

Different types of CIOs face different types of challenges. Discuss the challenges each type of CIOs face on a day to day basis. [20]

#### Question 2

It is important when one considers Enterprise Architecture to align with the operating model of the enterprise. Using a diagram to discuss the four different types of operating models as defined by Ross (Enterprise Architecture: Driving benefits from IT, MIT Sloan, 2006).

[18]

#### Question 3

One of your early design decisions at the start-up of running a software development company would be what your team structure for your projects should look like. Discuss the role clusters of the Microsoft Solutions Framework by identifying the role clusters and the responsibilities of the cluster.

[18]

#### **Question 4**

Building a high performance team is critical to delivery. The most challenging attributes of teaming can also yield big organisation and individual benefits. Discuss any four of the five challenging attributes (or category of challenge) of teaming by highlighting the attributes, the challenges and also the benefits to the organisations and the individual as identified by Edmondson (Edmondson, Amy, Teamwork on the fly, Harvard Business Review; Apr2012, Vol. 90 Issue 4, p72-80)

[16]

#### Question 5

During the Global Economic downturn focus in the IT Industry has shifted to cost pressures. One mechanism to reduce costs is process optimisation. Discuss the principles of Lean Management as set out by Staats and Upton (Lean Knowledge Work, HBR, 2011).

[18]

#### Question 6

Service Management is a critical component of any Software Factory. The ITIL Framework provides a framework for IT Service Delivery Best Practice.

• List the different stages of the ITIL Service Life Cycle.

(5)

· List the benefits of ITIL

(5) [10]

TOTAL: [100]