FACULTY OF SCIENCE

APK ACADEMY FOR INFORMATION TECHNOLOGY

MODULE	**IT00217/IT28X17** INFORMATION SECURITY RISK ANALYSIS
CAMPUS	**APK**
EXAM	**JANUARY 2017** SUPPLEMENTAL

DATE   January 2017   **SESSION: 08:00 – 10:00**

ASSESSOR(S)   **PROF CP LOUWRENS**

INTERNAL MODERATOR

EXTERNAL MODERATOR   **PROF R PIDERIT (UFH)**

DURATION 2 HOURS   **MARKS   120**
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NUMBER OF PAGES: 3 PAGES

INSTRUCTIONS: ANSWER ALL THE QUESTIONS

QUESTION 1

Define "Risk" according to:

    a) Peltier   [3]
    b) ISO 3100   [3]

QUESTION 2

Draw a diagram illustrating Risk Management during the System Development Life Cycle Phases.   [20]

QUESTION 3

Define the following terms:
    a) Probability   [2]
    b) Impact   [2]
    c) Vulnerability   [2]

QUESTION 4

The Factor Analysis of Information Risk (FAIR) comprises 10 steps in four stages. Name and describe the four stages and the steps within each stage.
                                                              [14]

QUESTION 5

You have been tasked to arrange a Pre-FRAAP meeting. Prepare a Pre-FRAAP meeting checklist for use **during** the meeting.   [14]

QUESTION 6

Draw up a FRAAP Session Agenda and indicate who would be responsible for each agenda point.   [10]

QUESTION 7

Briefly discuss the difference between Risk Analysis or Project Impact Analysis (PIA) and Risk Assessment.   [8]

QUESTION 8

Copy and complete the following Pre-Screening Results Matrix (numerical values) and indicate the colour of each cell (Red/Yellow/Green)   [12]

Disclosure	Criticality				
	1	2	3	4	5
5					
4					
3					
2					
1					

QUESTION 9

Illustrate the **Disaster Recovery Time Line** by means of a diagram.   [8]

QUESTION 10

List the six guidelines for effective policy.   [6]

QUESTION 11

In your own words describe how you would go about selecting cost-effective countermeasures/ controls to address a specific risk. Which factors will you consider and how can you prove the countermeasure is cost-effective?   [10]

QUESTION 12

Name and briefly discuss "Candidate Control Actions" as part of the Security Engineering Risk Analysis (SERA) Framework.   [6]

Total: 120 marks