



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE BACHELOR OF SCIENCE IN COMPUTER
SECURITY AND FORENSIC
3RD YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: IIT 3314
COURSE TITLE: ORGANIZATION AND PROJECT MANAGEMENT
EXAM VENUE: STREAM:
DATE: EXAM SESSION:
TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other three questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE 30 MARKS

An international banking and financial services group intends to develop an internet-based personal finance management system (“IPFMS”), to allow high-worth individuals to better manage their affairs, by integrating their current account, savings, credit card, mortgage and personal loans to reduce interest payable by automatically moving cash between accounts.

This will involve three divisions of the company (banking, mortgage and credit card), each of which operates autonomously, and is responsible for meeting its own performance targets, and are based in Leeds, Chester, and London. The banking and mortgage divisions run their own IT applications in Oracle and C++ respectively, while the credit card division outsources its operations to a third party, Hyperion, specialising in financial applications, using DB2 on IBM mainframes.

IPFMS should allow individuals to access all their accounts under one umbrella over the internet, so that a full range of functions are supported, including viewing of balances, recent transactions, direct debits and standing orders, interest, etc., as well as inter-account transfers.

The new application will integrate the existing systems with a new front-end (which will involve technologies new to the group, including XML, ASP, Java,) and must address security issues as a top priority, to gain and retain customer confidence.

The product will go live on 1st May 2019, in 6 months time, and has already been announced to the financial press; an extensive advertising campaign is due to begin in mid-January. It is intended that distribution of software to customers by direct download will start on 1st April 2019. The main board of the group sees this as a means to catch up on rivals who have already gone down this route, and hope that IPFMS will be a strategic mainstay of the group for years to come. The group Finance Director has overall responsibility for the success of the project, and has appointed one of his senior executives to liaise with the project leader, to monitor progress, and set priorities for the development team. At present, the management structures for the new system still has to be finalized.

The team will be composed of 12 staff from the banking and mortgage divisions (database specialists, programmers and analysts), 15 new staff to develop the front end using the new technologies, 4 DB2 contractors to work closely with Hyperion on the credit card application, 2 staff seconded full-time from Hyperion, a communications expert, a security specialist, and 4 business analysts. Existing staff will continue to work at their current locations, while new staff and contractors will work in the London offices. Recruitment of the new staff and contractors is already in progress. Financial and marketing executives from both group headquarters and the divisions will be involved on short-term secondments. The project leader is an experienced IT manager from the banking division.

Required

1. Identify the main risks facing this project. (5 marks)
2. Suggest how these could be managed. (15 marks)

QUESTION TWO 20 MARKS

The following activities have been identified for a development project, with estimates of their duration, and sequence in which they should be carried out.

Activity	Duration (weeks)	Depends on
A	6	-
B	3	A
C	8	A
D	5	B,C
E	7	C
F	5	D
G	4	E,F
H	4	F
I	7	G
J	8	G,H
K	6	J

Using an appropriate planning technique, identify the total duration of the project, and identify those activities the project manager will want to monitor carefully while they are in progress.

(20 marks)

QUESTION THREE 20 MARKS

- a) McCall identified 11 quality criteria in his hierarchical model of software quality. Identify **four** which you think will be important to the new online applications, justifying your choices.

(8 marks)

- b) Discuss how the non-financial benefits of a new applications could be identified and delivered.

(12 marks)

QUESTION FOUR 20 MARKS

- a) Explain how control of requested changes to existing systems could be effectively managed.

(8 marks)

- b) PRINCE2 is held to reduce risks commonly associated with large system-building projects, and allow for better management. Explain why this is so, illustrating your answer with reference to the processes and roles in PRINCE2.

(12 marks)

QUESTION FIVE 20 MARKS

- a) The sequence and duration of activities have a major impact on meeting the deadline for completing the system. Explain which activities the project manager will particularly want to monitor, and why this is so. (10 marks)

- b) Discuss why it can be useful to carry out a Post Implementation Review (PIR) of a system which has been put into operation. (10 marks)