UGANDA MARTYRS UNIVERSITY, LUBAGA CAMPUS

FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

DEPARTMENT OF MANAGEMENT SCIENCE BAM III SEMESTER TWO 2017/18

COURSE UNIT: PROJECT PLANING AND MANAGEMENT

DATE: Wednesday, 2nd May 2018

Time allowed: 4:00pm-7:00pm

Instructions to Candidates:

Read the following before answering the examination questions.

- 1) Do not write anything on this question paper.
- 2) Write neatly and show all workings clearly.
- 3) Start every question on a new page
- 4) Clearly state the question number & sections attempted
- 5) Answer **any four** questions, question **one** iscompulsory

QUESTION ONE

a) Explain the term project resources? Name and briefly explain the categories of resources.

(5 marks)

b) The approach to resource scheduling should be governed by the choice between two planning options or priority rules. Name and explain these priority rules (5 marks)

c) Project Abstract;

The objective of the Urban Support Program Project is to establish and strengthen urban institutions to deliver improved infrastructure and services in participating counties in Kenya. Economic growth has been accompanied by rapid urbanization. Nonetheless Kenya remains under-urbanized. This means Kenya can still leverage the benefits of urbanization for improving economic opportunities and living conditions. The Government of Kenya has recognized the need to manage urbanization as part of its overall development strategy. Kenya Vision 2030 highlights rapid urbanization as one of four key challenges facing the country. Within the over-arching framework of vision 2030, the urbanization component of the Second Medium Term Plan (MTP2) 2013-17 aims to facilitate a sustainable urbanization process through an integrated urban and regional planning management framework of Kenyan urban centers and towns. Aligned to that goal, the MTP identifies a series of investment programs to enhance infrastructure, connectivity and accessibility, safety and security. Developing the basic institutions required for effective urban management is critical to deliver these investments and for urbanization to contribute to sustainable growth in Kenya.

Required.

- (i) Discuss the various feasibility studies to be carried the during project Urban Support Program Project appraisal (7 marks)
- (ii) Develop a sustainability plan for the Urban Support Program Project (8 marks)

QUESTION TWO

Energy for Rural Transformation (ERT) Project

The ERT Project III - Health component is part of the overall ERT Programme under MEMD as the Lead Agency with the overall goal of improving delivery of health services in rural health centres through increased access to modern energy and ICT services. However, MoH has to cater for the Taxes, clearing and forwarding costs, training of its Users, and Maintenance costs for the solar systems through Service contracts signed with the suppliers of the solar systems.

The key areas of intervention will be: • Lighting (for both medical buildings & staff houses), • Vaccine refrigeration for HCII, III & IV, • Blood refrigeration at HCIV, • Energy for operation of essential medical equipment -Microscope, ultrasound scanner, and other low energy consumption equipment in the HCIV Theatre using solar power .• Energy for Health education, communication and data management

The major objective of the project will be to improve the delivery of health services in rural health centers through increased access to modern energy and ICT services.

The specific Project objectives are:

- 1. To increase access to modern energy for lighting for at least 50% of the HCll and HCllls and all HClV s not connected to the national hydroelectricity grid using solar power
- 2. To connect all HCs within 500m of the national hydroelectricity grid.

The ERT Project III will be implemented in the Districts with low rural electrification rate and excluded Districts that already benefited from ERT I & II and those are earmarked to benefit from the United Nations Foundation Sustainable Energy for All (SE4ALL) initiatives. The project is estimated to cost UGX 12 BN.

Expected outputs of the project:

- All HCIV's connected to hydroelectricity grid power and at least 50% of HcII's and HCIII's are provided modern energy by installation of solar power or connection to the hydroelectricIFY'
- Well maintained solar PV energy packages in the ERT beneficiary HCs.
- Improved security and working environment in ERT project beneficiary HCs

Required

- a) Project managers are tasked with monitoring project activities, identify relevant areas that must be monitored in a project and justify why. (05 marks)
- b) Develop a comprehensive Monitoring and Evaluation (M&E) plan for the project (12 marks)
- c) Identify and explain challenges that may arise during the M&E of the project (08 marks)

QUESTION THREE

Project Title: Proposed Luweero Fruit Processing Project; Project Site or Location Luweero;

Project Promoter or Owner XXXXXXXXX

Project Description: Establish a multi-purpose fruit processing facility (12MT/hr. for 16 hours a day) with the most suitable production systems and processing technology for fruit chopping, pulp extraction, evaporation, pasteurization, fruit drying and production of fresh juice.

Investment Amount Required (US\$) \$7,413,000 Project Cash flows [expected cash flows in (US\$)] Year 1: US\$ 721,451,Year 2: US\$ 874,109,Year 3: US\$ 1,071,587

Investment Type: *Joint Venture

Project status: Feasibility Completed (Source UIA)

Required

a) Explain areas of concern you would have been addressed before developing feasibility

(10 marks)

b) Develop a simple project feasibility report for the project of fruit processing (15 marks)

QUESTION FOUR

Project Title: Kampala Cable Car Project, Project Site or Location: Kampala, Uganda

Project Promoter or Owner XXXXXXX

Uganda Project Description

Kampala Capital City Authority is proposing the introduction of an Urban Cable Car (Ropeway Vehicle) system. This technology is envisioned to achieve high order objectives such as; reduction in pollution (air and noise), traffic decongestion, improvement in transit connectivity, beautification of the urban environments, and development of a reliable and highly profitable transportation means. **Investment Amount Required (US\$)**

US\$200Million Project Cash flows [expected cash flows in (US\$)]

Year 1: US\$ 19, 382, 400, Year 2: US\$ 20, 351, 520, Year 3: US\$ 21,369,096

Project status: Feasibility Completed (Source UIA)

Required:

- a) Explain
 - (i) What types of contract may be used and who will be the experts for the Kampala Cable Car Project (09 marks)
 - (ii) What standard forms to be used? (05 marks)
- **b**) Contract management is a special case of project risk management:
 - (i) Identify (contracting) risks (04 marks) and
 - (ii) Develop (contracting) risk responses or how you would deal with (contracting) problems for the Kampala Cable Car Project indentified in (b-i) (**06 marks**)

QUESTION FIVE

A project developed by the Ministry of Health to train medical workers in Kampala district is composed of the following activities A-I as shown in the table below. The durations are in weeks and the costs are in Uganda shillings.

Activity	Predecessor	Duration in	Crash time	Normal cost'	Crash
		Normal time	(Weeks)	000,000	cost'000'000
		weeks (a-m-b)			

A	-	5-6-13	4	17	28
В	-	2-7-12	5	12	27
С	A	1.5-2-2.5	7	16	20
D	A	1-3-5	4	8	13
Е	В	4-5-6	2	15	25
F	В	1-1-1	5	15	30
G	С	2-3-10	2	8	15
Н	D,E	4-5-6	3	9	18
I	F	3-5-7	2	6	12

(a) Draw the project network and find the critical path (4 marks)

(b) Determine the Normal critical path and the crash critical path (4 marks)

(c) Which activity has the most precise time estimate? Why? (4 marks)

(d) Determine the earliest start, latest start and slack time for all activities (10 marks)

(e) Determine the change in cost per week (3 marks)

QUESTION SIX

Project Title: Real Life Activation

Project Site or Location Central, Western and Northern Uganda

Project Promoter or Owner: Real Life Activation

Project Description

Real Life Activation is a project that aims at making profits by improving people's lives to prosper through Agriculture and other trade activities. Our work is to make people transform subsistence farming (growing for home consumption) to commercial farming. The project is aimed at making profits by changing people's lives, improving their economic growth through poverty reduction, it has ensured food security and ultimately diversified Uganda's export base. The project encourages farmers to work hard and we find market for their produce. There is market for everything that is produced in Uganda. We have registered networks of farmers who do both crop and animal husbandry for commercial purposes. We support our farmers to produce and we find market for their produce in and outside Uganda.

- a) Explain possible close out tools that can be used in the Real Life Activation (05 marks)
- b) Identify and explain how Real Life Activation can terminate its project objectives (08 marks)
- c) Develop a lessons learned report for the Real Life Activation project (12 marks)