KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2018/2019

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

BMS 843: PROJECT FINANCING AND RESOURCE SCHEDULING

DATE: Wednesday, 27th March 2019 **TIME:** 5.30 p.m. - 8.30 p.m.

INSTRUCTIONS:

Answer Question ONE and ANY other three questions.

QUESTION ONE (40 MARKS)

(a) Project analysis includes various aspects. Explain while giving at least four core areas that a project manager must conduct a detailed analysis before determining if the project is feasible. (8 Marks)

(b) Explain three disadvantages of sources external sources of financing a project in project management. (6 Marks)

(c) Discuss the features of a sound investment appraisal technique. (8 Marks)

(d) Explain three advantages of zero based budgeting in project management. (6 Marks)

(e) You have assigned to lead the project of selling badges in the forthcoming Nairobi ASK Show. The project Director recommends that you sell the badges at Sh. 90 each. The badges cost Sh. 50 to produce and you incur Sh. 20,000 Nairobi county license.

Required:

(i) Compute the breakeven point. (3 Marks)

(ii) Compute the margin of safety. (3 Marks)

(iii) Compute the number of units that must be sold to earn before a tax profit of 20%. (3 marks)

(iv) Compute the number of units that must be sold to earn after tax profit of Sh. 16,400, assuming that the tax rate is 30%. (3 marks)

QUESTION TWO (20 MARKS)

(a) Discuss four problems encountered in developing a budgeting system. (8 marks)

(b) Denats Limited is considering two mutually exclusive projects. The projects A and B have the following cash flows.

Year	Project A ('000')	Project B ('000')
1	5000	4500
2	6000	8000
3	2000	4000
4	3500	2000

i. Denats cost of capital is 12%.

ii. Project A requires a cash outflow of Ksh 8,000,000 in the first year and Ksh 1,000,000 in year three and has a salvage value of ksh. 1,500,000 at the end of year Four.

iii. Project B requires a cash outflow Ksh. 10,000,000 in the first year and has Disposal cost of ksh 800,000 at the end of the year Four.

Required:

Advise on the management which project they should adopt using

(i) Payback period (4 marks)

(ii) Net present value (4 marks)

(iii) Profitability index (4 marks)

QUESTION THREE (20 MARKS)

1. (a) Differentiate between Merge events and Burst event in PERT. (4 marks)

(b) Dan Obel a project manager has identified the following activities along with their costs.

Activity	**Normal**		**Crash**	
	Time in weeks	**Cost in Sh.**	**Time in weeks**	**Cost in Sh**
1 - 2	3	300	2	400
1 - 3	3	3-	3	30
2 - 4	7	420	5	580
2 - 5	9	720	7	810
3 - 5	5	250	4	300
4 - 5	0	0	0	0
5 - 6	6	320	4	410
6 - 7	4	400	3	470
6 - 8	13	780	10	900
7 - 8	10	1000	9	1200

Indirect costs are Sh. 40 per week.

Required:

(i) Draw a network and identify the critical path. (5 marks)

(ii) What are the normal project duration and associated cost? (3 marks)

(iii) Find out total float for each activity. (4 marks)

(iv) Crash the relevant activities systematically and determine the optimum project time and cost. (4 marks)

QUESTION FOUR (20 MARKS)

(a) Explain four advantages of Net present Value as a project evaluation technique. (8 marks)

(b) Johnson and Johnson Ltd has four plants each of which can manufacture any one of the four products. Production cost and sales revenue differ from one plant to another.

Plant	Sales revenue (Sh.) Product				Production Cost (Sh.) Product			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**
A	65	78	83	85	33	40	43	45
B	85	52	59	73	45	28	31	37
C	83	56	69	78	42	29	36	41
D	49	80	85	73	27	42	44	37

Given the revenue and cost data above, obtain which product each plant should produce to maximise profits. (12 marks)

QUESTION FIVE (20 MARKS)

(a) Explain three assumption of the break even analysis. (6 marks)

XYZ Ltd manufactures two products namely X and Y, the company uses two materials A and B in the manufacture of these products. The following information is given for the year 2017.

i. **Budgeted sales**

Product	**Quantity**	**Price**
X	10,000	40
Y	8,000	30

ii. **Materials used**

Material	A (Sh.)	B (Sh.)
Unit cost	5	8

iii. **Quantities used**

X	5	3
Y	4	4

There were no stocks at the beginning of the year. Stocks at the end of the year are expected to be:

X	1000 units
Y	500 units

You are required to prepare:

(a) Sales budget (4 marks)

(b) Production budget (6 marks)

(c) Material usage in quantities budget. (4 marks)