# BOWEN UNIVERSITY, IWO, NIGERIA FACULTY OF SOCIAL AND MANAGEMENT SCIENCES DEPARTMENT OF BANKING AND FINANCE

**B.Sc. DEGREE PROGRAM** 

# FIRST SEMESTER EXAMINATION, 2013/2014 SESSION

COURSE TITLE: BUSINESS FINANCE

COURSE CODE: BFN 317 TIME ALLOWED: 3 HOURS

# **INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE**

## (1)aWrite short note on the following?

- i. Compare and contrast Right issue and Bonus Issue
- ii What is Financial Instrument and Financial Assets.
- iii. What is hybrid Security? State tits features and example
- iv What is the capital structure?
- v What is Gilt- edged security? 5mks
  - 1b Olomosua Plc, has set aside a sum of money totally N2,750, 000, which it prepares to invest in a new project. As the financial manager of the company, the Board of Director has forwarded the following investment proposal analysis to your table for consideration and advice.

<b>PROJECTS</b>		Α	В	C	D	E	F	G	Н	I	J
PI	1.19	1.20	1.17	1.2	1.22	1.15	1.10	1.15	1.22	1.16	
I/O ('000)	450	450	600	900	1,200	1,200	900	600	300	300	

Where PI = Profitability of each project and I/O represent Initial Outlay for each of the project.

Required.

- i. Calculate the NPV of each of the Project and recommend which project the company should execute.
- ii. Suppose there is a soft Capital Rationing and recommends which project the company should execute. 5mks
- 2a. Risk, Return and investment partners are considering two mutually exclusive projects whose annual possible net cash flows have the following distributions:

Proj	ect A			
Probability	Net cash flows	<b>Probability</b>	Net cash flows	
	₩,000			000, <del>4</del> 4
0.1	200	0.2		210
0.6	300	0.6		330
0.3	450	0.2		450

- i. Calculate the expected annual net cash flows (expected value) for each project. (2mks)
- ii. Calculate the standard deviation of the net cash flows for both projects and identify the riskier project. (4mks)
- iii. Calculate the co-efficient of variation for both projects which measure the riskiness of the project. And indicate the project to select with reasons. (4mks)

**2(b)** Immorality is forbidden Plc is financed partly by equity and partly by debenture. The equity proportion

is always kept at 2/3 of the total. The cost of Equity is 18% and that of the Debt is 12%.

A new project is under consideration, which will cost #100,000 and yield returns before interest of #17500/annum in perpetuity. Should the project be accepted? 10mks

3 Abstain From Sinful Appearance Plc plans a take-over Love not the world Ltd, a company with great potentials for growth, but lack the resources needed to take advantage of the market opportunities The estimated cost of the acquisition of the Abstain From Sinful Appearance Plc is #20million. The managing director of Abstain From Sinful Appearance Plc has approached his Banker, Free Fund Plc for a possible credit facility. The bank's rates were quoted as follows:

i. Term loan 28% ii. Call money 20% iii. CBN money rate 18% The other alternative for Wide Mouth Ltd will be to approach the Capital Market for the required funds. The present capital structure of the Wide Mouth Ltd is as shown below:

Authorized Share Capital	#
10,000,000 Ordinary Share of #1.00 each	10,000,000
Issued and paid- up capital	#
5,000,000 ordinary share of the #1.00 each	5,000,000
General reserve	1,000,000
15% Preference share	1,500,000
18% debenture issue @ per 2008	1,500,000
	9,000,000
Further information	
Market value of ordinary share	#2.20
Market value of reference share	#0.85
MV of debenture share at redemption in 2011	#110
Dividend	20k/share
Growth rate dividend payout	5%
Required	

- a. What is weighted average cost of capital (WAAC)?. Give a clear explanation to justify its use over the other stand alone cost of capital. 20mks
- 4. Mr. Foresight success is an ambitious young man who has recently been appointed to the position of finance directors of Sweet Temptation Nigeria Plc, a company quoted in the second tier of the capital market. He regards his appointment as a temporary one, enabling him to gain experience before moving to higher organization. His intension is to leave sweet temptation Nig. Plc in three years time with its share price standing high. As a consequence, he is particularly concerned that the reported profits of the company should be as high as possible in his third and final year with the company.

The company is proposing to raise N7million from a right issue and the company directors are considering three ways of using these funds. Project A, B, C are being considered, each involving the immediate purchase of equipment costing N7million. One project only can be undertaken and the equipment for each project will have a useful life, equal to that of the project with little scrap value. Mr.

Foresight favours project C, because it is expected to show the highest Accounting return in the third year. However he does not want to reveal his real reason for favouring project C. and so in his report to the M.D, he recommends project C. because it gives the highest IRR.

The following summery were extracted from his report:-

#### **Net Cash Flows**

	Year	0	1	2	3	4	5	6
Project		N,000	₩,000	₩,000	₩,000	₩,000	₩,000	₩,000
A		7	6	6	6	6	6	6
В	-	7	4	4	4	4		-
C	-	7	4	3	5	0.8	2	

The Chairman of the company is used to projects being appraised in terms of pay back and NPV, and he is consequently suspicious of the use of ARR and IRR as a method of project selection. Accordingly, the chairman has request for an independent report on the choice of project. The company cost capital is 20% Required

- (a) Calculate the pay back period for each of the projects (3marks)
- (b) Calculate the Net present value for each of the projects (3marks)
- (c) Calculate the IRR for each project using 40% cost of capital for negative NPV (3marks)
- (d) Calculate Profitability Index for each of the projects. (3marks).

And recommend under each method which of the project A,B,C should be accepted.

A times there may be conflict between NPV and IRR. Discuss the various steps that must be taken to investigate the causes. Use the table below to demonstrate your explanation (8mks)

## **Net Cash Flows**

	Year	0	1	2	3
Project		₩,000	₩,000	₩,000	₩,000
A		10.2	6	5	3
В		35.250	18	15	15

- 5.a) What is risk and uncertainty Give a clear difference between the two terms (2marks)
- b) Explain Eight methods of evaluating risk and uncertainty in investment appraisal. (6marks)
- c) A project has an initial outlay of N15million. Return in year 1 is N13.5million with probability of 0.4 or N9million with probability of 0.6. If in year one N9 million return is generated, then in year 2 the probability that N12million will be generated is 0.2 and the probability that 10.5 million will be generated will be 0.8. If in year one N13.5 million return is generated, then in year 2 the probability that N6million

will be generated is 0.7 and the probability that 1.5 million will be generated will be 0.3. Find the coefficient of variation if the discount rate is 10% (8mks)

d) State the assumption WACC (4mks

### 6.a) Define the following terms:-

- i) Sinking fund and Annuity (ii) Future value of ordinary annuity (iii) Present value of ordinary Annuity
- (iv) Future value of Annuity due (v) Present value of Annuity due (2mks each)
- 6 b) At a recent management meeting of Bowen University Consultancy Services Ltd. The production manager had raised a suggestion that certain sum of money be set aside annually for the purchase of new automated machine, which could be used to replace the existing one, the company is using now in five years time before the new technology of production will make the current machine absolute.

The Chief security officer who had always want to gain prominent in any of the meeting where he is, suggest that the company should set aside N1m annually which will accumulate to N 5m at the end of year five, when the company will need the sum. You as the financial controller of the consultancy had disagreed with the CSO suggestion, but simply informed the meeting that the amount needed to be set aside annually, should be less than N1m. This matter degenerated into serious argument and disagreement at the meeting, until the meeting came to an end without any decision taking about how much should be set aside annually for the purchase of this production machine in five years time

# Required;

Prepare a memorandum report as the Financial Controller that you hope to submit to the Managing Director before the next management meeting where the matter will be bought up for discussion again, showing:-

i How much to be set aside and debited to profit and loss account annually. Assume cost of borrowing to be 10%. (4marks)

ii A sinking fund table, that the M.D will use to convince the CSO that your suggestion is the right one. (6marks)