

### **NATIONAL OPEN UNIVERSITY OF NIGERIA**

Plot 91, Cadastral Zone, NnamdiAzikiwe Express Way, Jabi-Abuja Faculty of Management Sciences, Department of Financial Studies JULY Examinations 2017

COURSE CODE: ACC 313 CREDIT UNIT: 3

**COURSE TITLE: MANAGEMENT ACCOUNTING** 

TIME ALLOWED: 2 1/2 HOURS

#### **Instructions:**

1. Attempt question number one (1) and any other three (3).

2. Question number 1 is compulsory and carries 25 marks while the other carry 15 marks each.

3. Present all your points in coherent and orderly manner.

# **QUESTION ONE**

Johnson Company Limited is a large integrated conglomerate with shipping, metals and mining operations throughout the country. The General Manager of the shipping division has been directed by the Board to submit his proposed capital budget for 2016 for inclusion in the company wide budget. The Divisional Manager is considering the following projects, all of which require an outlay of capital and have equal risk.

Project	Investment required	Return
	N"000	N"000
1	24,000	5, 520
2	9, 600	3, 072
3	7,000	980
4	4, 800	864
5	3, 200	640
6	1, 400	392

The Divisional Manager must decide which of the projects to accept. The company has a cost of capital of 15%. An amount of N60 million is available to the division for investment purposes.

# Required:

Compute the total investment, total return on capital invested and residual income on each of the following assumptions, indicating the preferred project:

- a). The company has a rule that all projects promising at least 20% or more should be accepted.
- b). The Divisional Manager is evaluated on his ability to maximise the return on capital invested.
- c). The Divisional Manager is expected to maximize residual income as computed by using the 15% cost of capital.

### **QUESTION TWO**

Gold and Silver Company is a company that is specialised in printing jobs. The Managing Director is saddled with the task of preparing bids for most of the company's jobs. His cost budget for 2016 is as follows:

	N	N
Material		500,000
Labour		200,000
Overhead:		
Variable	250,000	
Fixed	<u>150,000</u>	400,000
Total production cost of the job		1,100,000
Selling and Administration:		
Variable	85,000	
Fixed	<u>120,000</u>	205,000
Total cost		<u>1,305,000</u>

He has a target profit of N295, 000 for the year 2016.

### Required:

- a. In respect of the job, compute the average target mark-up percentage for setting prices as a percentage of
  - i. Prime costs
  - ii. Variable production cost

- iii. Total production cost
- iv. All variable costs
- v. Total costs

b. Explain the major factors involved in pricing decisions.

### **QUESTION THREE**

Magama Ltd. has the following total factory overhead computed at both the high and low levels of activity for a given month of operation:

Levels of activity	High	Low
Direct labour hours	150,000	100,000
Total factory cost(N)	352,500	284,000

The total factory overhead above consists of indirect materials, repairs and rent expenses. The company has analysed, at the 100,000 direct labour hours of activity level that costs exist in the following proportions:

	N
Indirect materials (variable)	100,000
Repairs	64,000
Rent (fixed)	120,000
	<u>284,000</u>

For planning purposes, the company wishes to break the repairs cost into its variable and fixed elements

You are required to:

- (a) Determine how much of the N352,500 total factory overhead costs at the high level of activity above that relates to repairs costs.
- (b) Determine by means of the high and low method of cost analysis, the cost function for the repairs cost.

### **QUESTION FOUR**

The following information has been gathered with regard to material X of Tunde Ltd.

	Units
Normal month usage	44,000
Maximum anticipated monthly usage	57,000

Minimum anticipated monthly	y usage	9,800
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Delivery period from suppliers:

Maximum 5 months

Normal 4 months Minimum 2 month

Re-order quantity (EOQ) 40,000 units

Required:

- (a) Calculate:
- (i) Re-order level
- (ii) Minimum stock level
- (iii) Maximum stock level.
- (b) Comment on four factors, which may have to be taken into accounts in setting the maximum stock level

# **QUESTION FIVE**

Amanda Nigerian Limited began work on 1 January 2010 on a contract for the building of an extension to new Lagos road amounting N1,800,000. The retention on contract is agreed at 10%. On November 2010 the certificate of work approved amounted to N1,200,000. The following information is available.

	N
Materials sent to site	450,000
Labour engaged on site	360,000
Plant installed at cost	180,000
Direct expenditure	72,000
Establishment charges	150,000
Materials returned to stores	15,000
Cost of work not yet certified	90,000
Materials on site at 31 December 2010	45,000
Wages accrued at 31 December 2010	15,000
Direct expenses accrued at 31 December 2010	3,000
Value of plant at 31 December 2010	120,000

You are required to complete the Contract Account, showing the amount of profit likely to be taken into annual accounts to 31 December 2010 and to calculate the value of work in progress.

### **QUESTION SIX**

Mr Kunle recently convinced his friends and relations to lend him a loan of ₦350,000, which he intends to invest in a farming project. He estimates that the project will yield the following returns annually for next five consecutive years.

Year	$\mathbb{N}$
1	80,000
2	100,000
3	160,000
4	90,000
5	70,000

There was no scrap value at the end of the fifth year and the company desires to evaluate the project on the basis of accounting rate of return.

### Required:

Provide the accounting rate of return of this project under the two ARR methods on the assumption that the annual returns are profits after depreciation but before taxation.