

MLT — 47 — 3

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19/4/18

**REDEEMER'S UNIVERSITY**  
**P.M.B 230, EDE, OSUN STATE**



COLLEGE OF: MANAGEMENT AND SOCIAL SCIENCES .....

DEPARTMENT OF: FINANCIAL STUDIES .....

PROGRAMME: ACCOUNTING .....

COURSE CODE-ACC312/TITLE: OIL AND GAS ACCOUNTING .....

SECOND SEMESTER EXAMINATIONS 2017/2018 SESSION.

INSTRUCTIONS ON CHOICE OF QUESTIONS TO BE ANSWERED: .....

ANSWER QUESTION No. 1 AND ANY OTHER TWO (2) QUESTIONS

TIME ALLOWED: 2 HOURS .....

1. The following information relates to JOAD Oil and Gas Nigeria Plc., for the year ended 31<sup>st</sup> December, 2016

Trial balance as at 31<sup>st</sup> December, 2016

PARTICULARS	DR.	CR.
	N'000	N'000
Crude oil inventory at 1/1/2016	6,700,000	
Export sales		50,000,000
Local sales		10,000,000
Production cost	9,000,000	
Transportation cost	1,500,000	
Intangible oil and gas assets	117,000,000	
Salaries and wages	300,000	
Proved oil and gas properties	13,500,000	
Unproved oil and gas properties	8,300,000	
Accumulated DD&A: Oil and Gas Assets		5,200,000
Loan interest	3,500,000	
Bank interest	1,700,000	
Geological and geophysical costs	800,000	
Carrying costs and overhead	135,000	
Surrendered and impaired leases	230,150	
Unimpaired leases	1,500,000	
Exploratory wells: Successful	15,672,000	

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Unsuccessful	2,250,000	
Developments wells	20,567,000	
Wells in progress	11,570,000	
Expenditure for purchase of seismic data	683,650	
Royalties	1,500,000	500,800
Derivative financial instruments		
Loss on exchange	1,450,000	
Trade and other receivables	3,500,000	
Derivative financial instruments	2,503,200	
Cash and cash equivalents	500,000	12,500,000
Trade and other payables		
Investment in subsidiaries	14,500,000	
Other current assets	50,250,000	200,500,000
Share capital		9,850,000
Shared premium		560,000
Other reserves		
	<u>289,111,300</u>	<u>289,111,300</u>

The following additional information are also available (all the naira figures are in thousands N'000)

- i. Closing stock of oil and gas as at 31<sup>st</sup> December, 2016 N1,200,000
- ii. Accrued expenses as at 31<sup>st</sup> December, 2016 amounted to N3,500,700
- iii. Provision for decommissioning amounting to N564,200 is to be provided
- iv. DD&A is to be provided on proved oil and gas properties. Production during the year was 500,000 of oil and 600,000 mcf of gas. Reserves estimates of oil and gas at the beginning of the year (i.e. 1<sup>st</sup> January, 2016) were: oil 5,000,000 bb/s and gas 1,800,000 mcf, and the relative proportion of oil and gas is not expected to continue throughout the life of the property.
- v. All capitalized costs and intangible oil and gas assets are to be amortized at the rate of 10% per annum
- vi. The director's proposed a dividend of N2,000,000 on shares and Petroleum Profit Tax is to be calculated at the rate of 70%

vii. All workings are to be made to the nearest naira.

You are required to prepare the final accounts of the company in Horizontal form for use of the company's management for the year ended 31<sup>st</sup> December 2016, using Successful Efforts Methods

**Total = 26 marks**

2. In line with Accounting for Refinery Operations, explain the following terms:

a. Transfer pricing

**5 marks**

b. Allocation of cost to Joint Products

**6 marks**

c. Accumulation and classification of costs

**6 marks**

**Total = 17 marks**

3a. What are the key objectives of Petroleum Industry Bill (PIB) 2011 in Nigeria?

**9 marks**

b. Clearly list and explain the most controversial issues of Petroleum Industry Bill?

**8 marks**

**Total = 17 marks**

4a. What is petroleum by definition

**3 marks**

b. Oil and gas industry is one of the vital industries in the world, largely because of its strategic role in every economy and the world at large. The distinctive features that characterized the industry are derived from the nature of crude oil, its operations and commercial arrangement? What then are the characteristics of oil and gas industry?

**14 marks Total = 17marks**

5a. During the first quarter of 2014, JONAT Oil Company Nigeria Limited produced 50,000 barrels of crude oil from Field New-wine oil Field, which is located on shore, 5,000 barrels out of the total production were re-injected into the well to enhance crude oil recovery from an adjoining lease. The power generators used for field operations consumed 1,000 barrels during the quarter and 500 barrels were lost through evaporations. Assuming that posted price for the crude stream is US \$121 per barrel and exchange rate of US\$1 is equal to N160.

**Required:** Compute royalty liability for the quarter, assuming that the applicable rate of royalty is 20 percent. **6marks**

b. JOAD Oil Company Limited is an integrated oil company whose operations include exploration, production, refining, petrochemical and transportation. During the year ended 31<sup>st</sup> December, 2014, the company produced and transported 1,000,000 barrels of crude oil through its network of pipelines, out of the quantity produced; 400,000 barrels were transferred to be company's refineries in Nigeria. The posted price of the crude oil transferred to the refinery was US \$121 per barrel and the standard and actual API<sup>o</sup> of the crude stream were 40<sup>o</sup> and 42<sup>o</sup> respectively. The pipelines cost was N95,000,000 and are depreciated on a straight line basis at the rate of 5% per annum. N8,000,000 were spent on repair and maintenance of the pipelines during the year. Exchange rate of Naira to Dollar is US \$1.00 = N160.00

**Required:** Calculate the value of crude oil delivered to the refineries during the year.2013, Assuming that the posted price of crude oil are escalated or de-escalated by \$0.30 for every API<sup>o</sup> difference between standard and actual API degree. **6 MARKS**

c. Assume the following data are in respect of the entire leases owned by JONAT Oil Company Nigeria Limited. You are required to calculate DD&A for the year ended 31<sup>st</sup> December, 2014 on:

(i) Property-by-property basis and (ii) Country wide basis

	<b>Concessions</b>			
	<b>Lease 1</b>	<b>Lease 2</b>	<b>Lease3</b>	<b>Total</b>
	N	N	N	N
Capitalized Cost-end of this period (Net)	600,000	1,000,000	2,000,000	3,600,000
Estimates reserves end of the period (bbls)	4,000,000	3,000,000	6,000,000	3,000,000
production during the period (bbls)	1,000,000	500,000	1,200,000	2,700,000

**5marks**

**Total= 17 marks**