



WI-2-60-1-6

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**

University Examinations 2015/2016 Academic Year

**YEAR II SEMESTER I EXAMINATION FOR THE DEGREE OF BACHELOR OF
ACTUARIAL SCIENCE**

HRD 2201: ACCOUNTING AND FINANCE FOR ACTUARIAL SCIENCE

DATE: APRIL 2016

TIME: 2 HOURS

Instructions: Answer Question ONE and any other ~~THREE~~ ^{TWO} Questions in this paper.

QUESTION ONE

- a) For the following questions (i) to (x) choose the most appropriate answer from the multiple choice options (MCOs) provided. **[10 Marks]**
- i. Which of the following best summarises the duality assumption of accounting?
- A. There are frequently two or more ways to approach any accounting judgement.
 - B. Every transaction affects two balances and both must be adjusted in the bookkeeping records.
 - C. There ought to be independent verification of matters of judgement.
 - D. The bookkeeping records ought to be backed up regularly and the backup copy kept securely.
 - E. None of the above
- ii. A company is preparing its financial statements and must decide on an accounting policy for an unusual situation that is not covered by accounting standards. Which of the following best explains how the company should proceed?
- A. The company can use any policy that it wishes.
 - B. The company should use the policy that ensures the smallest profit.
 - C. The company should apply the logic in any accounting standard that deals with broadly comparable circumstances, even though that standard is not directly applicable.
 - D. The company should use the policy that yields the strongest statement of financial position.
 - E. None of the above
- iii. Who makes the final decision as to whether International Financial Reporting Standards are used as the basis for accounting in any given country?
- A. None of the below
 - B. The International Accounting Standards Board (IASB)

- C. The national government
 - D. Professional accountancy bodies
 - E. The national stock exchange
- iv. Which of the following is not a fundamental accounting assumption?
- A. Monetary unit assumption
 - B. Periodicity assumption
 - C. Duality assumption
 - D. Going concern assumption
 - E. None of the above
- v. Which of the following best summarises the difference between straight line and reducing balance depreciation?
- A. Reducing balance will lead to a higher charge in the short term after fresh investment in assets but the same total charge over the life of the assets.
 - B. Reducing balance will lead to a higher charge in the short term after fresh investment in assets but a lower total charge over the life of the assets.
 - C. Reducing balance will lead to a higher charge in the short term after fresh investment in assets and a higher total charge over the life of the assets.
 - D. Reducing balance will lead to a lower charge in the short term after fresh investment in assets and a higher total charge over the life of the assets.
 - E. None of the above
- vi. All the following except one are deferrals required as end-year adjustments on the trial balance. Which is the exception?
- A. Unearned income
 - B. Unpaid salaries
 - C. Prepaid salaries
 - D. Advance payments for future purchases
 - E. None of the above
- vii. The following are financial statements. Which one is not?
- A. The statement of comprehensive income
 - B. The statement of financial position
 - C. The trial balance.
 - D. The statement of cash flows.
 - E. Notes to financial statements
- viii. An item of equipment cost Sh.5,000 and has an estimated useful life of ten years, at which time it is anticipated that it will be scrapped and sold for Sh.200. The machine is now three years old. What is this machine's book value if the company uses the straight-line method of depreciation?
- A. None of the below
 - B. Sh.3,360
 - C. Sh.3,500
 - D. Sh.3,440
 - E. Sh.3,560
- ix. Which of the following accounting errors is unlikely to be revealed by the trial balance?

- A. Arithmetic error in the trial balance
 - B. Mis-casting of ledger accounts
 - C. Partial entry to the journal book
 - D. Failure to bring forward balances from previous post closing trial balance
 - E. None of the above
- x. Which of the following best describes the purpose of a cash flow statement?
- A. To show current and expected sources and uses of cash
 - B. To forecast future inflows and outflows of cash
 - C. To show the company's financial position
 - D. To show the company's profitability
 - E. To show historical inflows and outflows of cash

b) The following Trial Balance has been extracted from the books of Shirika Traders as at 30th June 2015 the year-end for the firm.

	DR (Sh)	CR (Sh.)
Capital		3,800,000
20% 5-year bank loan		1,500,000
12% 3 year loan		1,250,000
Inventory	2,500,000	
Furniture (cost Sh.300,000)	1,200,000	
Motor vehicles	1,600,000	
Provision for depreciation		750,000
Machinery	2,000,000	
Provision for depreciation		650,000
Buildings	2,800,000	
Bad Debts	200,000	
Drawings	250,000	
Purchases and Sales	4,950,000	12,250,000
Discounts	45,000	40,000
Returns	75,000	50,000
General expenses	2,900,000	
Interest		200,000
Short term investments	600,000	
Insurance	180,000	
Rates	110,000	
Advertising	210,000	
Debtors and creditors	2,800,000	2,110,000
Provision for doubtful debts		170,000
Loan interest	200,000	
Miscellaneous expenses	150,000	
Total	22,770,000	22,770,000

Additional information:

- ii. Half of the insurance and rates expenses paid relates to a prepaid amounts.
- iii. Further drawings of Sh.135,000 is expected to be made by the proprietor at the year end.
- iv. Professional charges for consultancy of Sh.50,000 need to be provided for at year end.
- v. The business offers some space for rent and is expecting Sh.1,050,000 as rental income.
- vi. The provision for doubtful debts needs to be maintained at 4% of the debtors at year end.
- vii. Depreciation is to be provided on Motor vehicles 20% reducing balance; Machinery 10% straight line and Furniture 12% straight line while closing inventory was determined at Sh.2,350,000.

Required:

- i. An income and appropriations statement for the period ending 30th June 2015. [20 Marks]
- ii. A statement of financial position as at 30th June 2015

QUESTION TWO

a) "A shilling yesterday is worth more than a shilling tomorrow" aptly describes the modern investing decision creed. discuss [4 Marks]

b) Distinguish between discounting and compounding as applications of time value of money [2 Marks]

a) Kijabe Ltd wishes to invest in a project that would lead to the following incremental sales and operations costs over its expected useful life of five years:

Incremental	Year 1	Year 1	Year 1	Year 1	Year 1
Sales (Sh.)	200,000	350,000	350,000	300,000	250,000
Costs (Sh.)	50,000	50,000	75,000	90,000	100,000

The project is expected to cost the company Sh.950,000 with an estimated salvage value of Sh.150,000. In addition it would lead to operational efficiencies estimated to contribute Sh.45,000 in management cost savings. 40% of the investment would be financed using a 5 year 10% loan. It falls in the 40% marginal tax bracket. The company's required rate of return is 8%

You are required to:

- i. Estimate expected incremental annual cash-flows from the investment
- ii. Compute the payback period of the project
- iii. Advise the company on whether to invest on the basis of NPV criterion
- iv. Suggest other possible criteria the company could use to evaluate the suitability of the project. [14 Marks]

QUESTION THREE

a) Ndinda wishes to invest in an opportunity that promises Sh.160,000; Sh.140,000; Sh.240,000; Sh.275,000 and Sh.100,000 and the end of years 1 to 5 respectively. Her required rate of return is 13%. What is the maximum she should pay this opportunity? [3 Marks]

b) Alidadi borrows a 5 year 12% Sh.1,000,000 fully annual instalment fully amortised loan from Jambura Bank. Prepare a loan amortization schedule to indicate the loan repayment patterns over the loan term [4 Marks]

- c) XYZ Ltd pays a constant dividend payout ratio such that earnings distributions trends have followed the 6.75 growth rate pattern of the firm. The dividend of sh.3.20 per share was awarded in the current financial period. The company's ordinary shares are currently trading at Sh.32.50 apiece at the Nairobi Stock Exchange while floatation costs for the common equity and the preferential share capital amount to 14% of the respective share prices. The company falls within the 30% marginal tax rate. The following is an extract from the current financial statements of XYZ Ltd

XYZ Ltd Balance Sheet as at 31.12.2015

Networth		
Noncurrent Assets		30,000,000
Current Assets	20,000,000	
Current Liabilities	(10,000,000)	
Net Working Capital		10,000,000
		<u>40,000,000</u>
Financed by:		
Sh.10 Ordinary Share Capital		16,000,000
Retained earnings		8,000,000
10% 5 Year Debt		12,000,000
Sh.20, 10% Preference Share Capital		4,000,000
		<u>40,000,000</u>

Required:

- The weighted average cost of capital
- The factors likely to influence XYZ Ltd's cost of capital

[8 Marks]

- d) Kinoo Ltd is considering investing in a portfolio of two investments asset A and asset B in the proportions of 40% and 60% of the entire investment respectively. The returns (in %) of the investments and the market are dependent on then state of the economy. The estimated returns under the various states of nature are shown in the table below:

State of economy	Probability	Asset A Return	Asset B Return	Market return
Economic Recession	0.25	10	12	14
Economic Average	0.45	14	10	12
Economic Boom	0.30	16	8	10

Required: The expected returns portfolio standard deviation of returns

[5 Marks]

QUESTION FOUR

Write explanatory notes on the following concepts used in accounting and finance

- The accounting cycle
- Sources of long term finance for a business
- Errors revealed and not revealed by the trial balance
- Functions of a finance manager

[20 Marks]