nAMIBIA UNIVERSITY
OF SCIEnCE AnD TECHnOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCE AND EDUCATION

DEPARTMENT OF MARKETING, LOGISTICS AND SPORT MANAGEMENT

QUALIFICATION : BACHELOR OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT HONOURS	
QUALIFICATION CODE: 08LSCH	LEVEL: 8
COURSE CODE: FTL821S	COURSE NAME: FINANCIAL TECHNIQUES FOR LOGISTICS MANAGEMENT OPERATIONS
SESSION: JANUARY 2023	PAPER: THEORY AND PRACTICAL
DURATION: 180 MINUTES	MARKS: 100

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
1. This question paper consists of six pages including this cover page.
2. There are six questions in this paper, and all are compulsory.
3. Start with the question that you understand best, and please number all your answers clearly, and correctly.
4. Avoid any form of academic dishonesty.
5. Where applicable, please show all your workings.
6. Students should use their intuitions to deal with any perceived ambiguities, and all assumptions made should clearly be indicated as such.
7. For qualitative answers, the number of marks allocated should serve as the basis for the length of your answer.
8. Unless otherwise stated, round off all your final answers to two decimal places.
9. The use of Financial Calculators or PV/FV is permitted.
10. Strictly, no pencil work shall be marked.

THE PAPER CONSIST OF 5 PAGES INCLUDING THIS COVER PAGE + 1 PAGE OF PV & FV TABLES

QUESTION 1: (14 MARKS, 25 MINUTES)

There are various business forms that can be found in Namibia. Depending on the formation of such a business, it can either be of a limited or unlimited liability. That is the reason why it is always important for every procurement officer to know about this distinction before you enter into any contractual obligations.

REQUIRED: Carefully, answer the following questions:		MARKS
(1.1.)	Identify any three forms of business formations that can be found in Namibia, and clearly state whether they are of limited or unlimited liability.	6
(1.2.)	There are various stakeholders that can be interested in the business' performance. One of such stakeholders are employees as they would want to ensure that their job security is always guaranteed. Identify any four stakeholders that would also be having interest in the business' performance, and clearly explain their direct economic interest to such a business.	8
TOTAL MARKS FOR QUESTION 1		14

As a procurement officer, it is important that you know how to assess not only the liquidity of an entity, but its profitability as well. This is a necessary practice because it influences your decision when it comes to selecting a reliable supplier(s). The following is an extract from the financial records of two prospective suppliers:

STATEMENT OF FINANCIAL POSITION (EXTRACT) AS 31 DECEMBER 2021		
	SUPPLIER A	**SUPPLIER B**
NON-CURRENT ASSETS:	**568,840.00**	**365,000.00**
Property, Plant and Equipment	568,840.00	365,000.00
CURRENT ASSETS:	**135,000.00**	**162,000.00**
Inventory	20,000.00	25,000.00
Accounts receivable	15,000.00	12,000.00
Bank	100,000.00	125,000.00
TOTAL ASSETS	**703,840.00**	**527,000.00**
EQUITY AND LIABILITIES:	**703,840.00**	**527,000.00**
TOTAL EQUITY	**423,840.00**	**409,000.00**
Share capital	300,000.00	275,000.00
Retained earnings	123,840.00	134,000.00
TOTAL LIABILITIES:	**280,000.00**	**118,000.00**
NON-CURRENT LIABILITIES:	280,000.00	118,000.00
Interest bearing long-term liabilities	280,000.00	118,000.00
CURRENT LIABILITIES:		
Accounts payable	11,000.00	9,000.00

STATEMENT OF PROFIT & LOSS (EXTRACT) FOR THE YEAR ENDED 31 DECEMBER 2021:		
	SUPPLIER A	**SUPPLIER B**
Sales revenue	800,000.00	735,000.00
Cost of sales	- 520,000.00	- 514,500.00
Gross profit	280,000.00	220,500.00
Operating expenses:	- 98,000.00	- 99,225.00
Operating profit	182,000.00	121,275.00
Finance cost	- 10,000.00	- 8,000.00
Profit before tax	172,000.00	113,275.00
Taxation at 28%	- 48,160.00	- 31,717.00
Profit after tax	**123,840.00**	**81,558.00**

REQURED: For each Supplier, calculate the following ratios:		MARKS
(2.1.)	(i) Current ratio, and (ii) Quick ratio	6
(2.2.)	(i) Gross profit margin, and (ii) Net profit margin	4
(2.3.)	Based on your answers obtained in (2.1) to (2.2), which one of the two Suppliers would you recommend to your organization, and why?	5
TOTAL MARKS FOR QUESTION 2		15

QUESTION 3   **(11 MARKS, 20 MINUTES)**

For every entity, investing in a right security/asset is considered a crucial undertaking. Given the persisting global economic crisis, majority of entities are resorting to a new normal especially those within the supply chain management space. Suppose your organization is contemplating to invest in one of the following mutually exclusive securities:

		Expected returns	
State of the economy	**Probability**	**Security A**	**Security B**
Normal	30%	16%	14%
Boom	50%	19%	19%
Recession	20%	-5%	-6%

REQUIRED: Carefully, answer the following questions:		MARKS
(3.1.)	On the basis of the expected return, which security would you recommend to your organization?	4
(3.2.)	On the basis of the standard deviation, which security would you recommend to your organization?	4
(3.3.)	Given your answers in (3.1) and (3.2), which one would you recommend to your organization as a final basis of its investment choice?	3
TOTAL MARKS FOR QUESTION 3		11

QUESTION 4   **(21 MARKS, 38 MINUTES)**

As a way of raising finance to finance capital projects, suppose your organization has issued a N$ 1 000 bond with a coupon rate of 4.75% per annum, and promises to pay back the principal in five years' time. Suppose the current market interest rate on similar bonds is 8%.

REQUIRED: You are to advise your organization on the cheapest option:		MARKS
(4.1.)	Value of the bond today when coupons are paid annually.	5
(4.2.)	Value of the bond today when coupons are paid half-yearly or bi-annually.	5
(4.3.)	Value of the bond today when coupons are paid quarterly.	5
(4.4.)	Value of the bond today when coupons are paid daily. *(Assume 365 days calendar year)*	5
TOTAL MARKS FOR CALCULATIONS		20
RECOMMENDATION MARK		1
TOTAL MARKS FOR QUESTION 4		21

Consider the following mutually exclusive projects:

	PROJECTS			
	A	B	C	D
Initial investment	(N$50 000)	(N$50 000)	(N$50 000)	(N$50 000)
Expected cash inflows: Year 1	N$15 000	N$18 000	N$14 000	N$17 000
Year 2	N$15 100	N$11 100	N$14 200	N$15 000
Year 3	N$13 500	N$16 500	N$12 500	N$13 500
Year 4	N$14 000	N$15 000	N$16 000	N$15 000
Year 5	N$12 900	N$10 500	N$14 900	N$13 900

The appropriate cost of capital is 10%.

REQUIRED:		MARKS
(5.1.)	On the basis of NPV, which one of the four projects should be accepted.	20
(5.2.)	On the basis of Profitability Index, which one of the four projects should be accepted.	5
TOTAL MARKS FOR QUESTION 5		25

	REQUIRED:	MARKS
(6.1.)	Mention the five C's of credit, and briefly explain why each is important when it comes to the process of screening a client.	10
(6.2.)	Provide four reasons as to why entities should keep adequate stock.	4
TOTAL MARKS FOR QUESTION 6		14

<<<END OF QUESTION PAPER>>>

Table 4

Present value interest factor of an (ordinary) annuity of $1 per period at i% for n periods, $PVIFA(i,n) = \$1*(1/(1+i)+1/(1+i)^2+1/(1+i)^3 \ldots 1/(1+i)^n)$.																				
Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176	7.586	7.070	6.617	6.215	5.858	5.539	5.251	4.992
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244	7.634	7.105	6.642	6.233	5.871	5.548	5.258	4.997
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999