

University of Kelaniya - Sri Lanka

Centre for Distance and Continuing Education

Faculty of Commerce and Management Studies

Bachelor of Business Management (General) Second Year Examination (External) – 2019

May – 2023

BMGT E2035 - Accounting for Managers

No. of Questions: Five (05)

Time: 03 hours

Answer all questions

Total Marks: 100 and Every main question carries equal marks.

Systematic calculators are allowed to be used. Mobile phones and mobile phone calculator apps are not allowed.

Question No. 01

a) You are given actual and forecasted production and sales details of Samudra Limited as follows.

Item	Actual (Rs. '000')	Forecasted (Rs. '000')
	Year - 2022	Year - 2023
Purchase of raw materials (Credit)	4,653	6,091
Opening raw materials	523	827
Closing raw materials	827	986
Raw material consumed	4,349	5,932
Direct Labour	368	498
Depreciation	82	90

Other manufacturing expenses	553	
Total Cost		704
Opening world	5,352	7,224
Opening work in progress	185	325
Closing work in progress	325	
Cost of production		498
	5,212	7,051
Opening finished goods	317	
Closing finished goods		526
Cost of goods sold	526	995
	5,003	6,582
Selling and distribution expenses	304	
Cost of Sales		457
Sales (Credit)	5,307	7,039
	6,087	8,006
Opening debtors	545	
Closing debtors		735
Opening creditors	735	1,040
	300	454
Closing creditors	454	
	434	642

You are required to:

I. Calculate Gross Operating Cycle

(06 Marks)

II. Calculate Net Operating Cycle

(06 Marks)

b) The following information has been extracted from the financial statements of Quest (Pvt.) Ltd., as at 31st March 2022 and 31st March 2021.

L	As at 31st March 2022	As at 31st March 2021
Inventory	2, 525,000	2,175,000
Trade Receivables	4, 525,000	2,850,000
Trade Payables	5,060,000	3,400,000

Total sales for the year ended 31st March 2022 was Rs. 29,500,000/- and the inventory resident period was calculated as 73 days. 50% of sales are on a credit basis, and all purchases are made on credit.

You are required to:

Calculate the length of the working capital cycle for the year ended 31st March 2022.

(08 marks)

(Total 20 marks)

Question No. 02

The following budgeted profit and loss account has been prepared for Thenuwara PLC for the four months of January to April 2023.

	January Rs.'000	February Rs.'000	March Rs.'000	April Rs.'000
Sales	60	50	70	60
Production Cost	50	55	32.5	50
Stock Adjustment	(5)	(17.5)	20	(5)
Cost of sales	45	37.5	52.5	45
Gross Profit	15	12.5	17.5	15
Admin/selling overhead	8	7.5	8.5	8
Net profit before interest	7	5	9	7

The following additional information is provided:

- i. 40% of the production cost relates to direct materials. Materials are purchased in the month prior to the month in which they are used, and 50% of them are paid for in the month of purchase. The remainder are paid for one month later.
- ii. 30% of the production cost relates to direct labour, which is paid for when it is used.
- iii. The remainder of the production cost is production overhead, and Rs. 5,000 per month is a fixed cost, which includes Rs. 3,000 depreciations. Fixed production overhead costs are paid monthly in arrears. The variable production overhead is paid 40% in the monthly usage and the balance one month later.
- iv. The administration and selling costs are quarterly in advance on 1st January, 1st April, 1st July, and 1st October. The amount payable is Rs. 15,000 per quarter.

- v. Creditors on 1st January 2023 expected to be Rs. 10,000 for direct material and Rs. 11,000 for production overheads
- vi. The amounts expected to be received from customers during January to March are:
 - January
- Rs. 69,600
- February
- Rs. 56,944
- March
- Rs. 56,470
- vii. The company intends to purchase capital equipment costing Rs. 30,000 in February, which will be payable in March.
- viii. The bank balance on 1st January 2023 is expected to be Rs. 5000 overdrafts. The bank balance on 1st December 2022 is expected to be Rs. 5000 (positive).
- ix. Interest is payable/receivable on average monthly bank balances (opening + closing) at the following rates.
 - Positive balance
- Interest receivable

1% per month

Negative balance

Interest payable

2% per month

Interest is payable/receivable in the following month.

You are required to:

Prepare the cash budget for each month from January to March 2023 for Thenuwara PLC.

(Total 20 marks)

Question No. 03

A company produces four types of products, and the following cost-related information is given.

Materials	A Rs.	B Rs.	C Rs.	D Rs.
	1,200	1,500	800	1,000
Labour (Rs.600 per Hour)	1,800	1,500	900	1,200
Absorbed production overhead cost	1,500	1,250	750	1,000
Unit Cost	4,500	4,250	2,450	3,200
Production Quantity (Units)	8,000	6,000	10,000	5,000

The overhead cost included in the above standard cost card has been absorbed into each product based on the labour hours. Now, the management accountant is about to allocate overhead cost based on Activity Based Costing (ABC Costing) and he has identified two cost pools in overhead cost as **Machine Setups** and **Quality Assurance**. Then, identified cost drivers are No. of purchase orders and No. of batches produced respectively.

The cost pool details are as follows:

Quality Assurance - Rs. 12,000,000

Machine Setups - Rs. 20,000,000

Rs. 32,000,000

Other related information as follows.

	A	В	С	D
No. of purchase orders	800	700	900	600
No. of batches produced	80	40	80	50

Required,

Calculate the unit cost for each product based on the Activity Base Costing method.

(Total 20 marks)

Question No. 04

Bay (Pvt.) Ltd 's product cost related information is given below.

Product	W	X	Y	\mathbb{Z}
Demand (Units)	1,000	2,300	1,450	1,970
Unit Selling Price	18	16	12	20
Unit Variable Cost	8	10	11	13
Production Overhead Cost	4,400	3,700	150	2,650

(i) Calculate the contribution per unit for each product.

(08 Marks)

(ii) Which products are providing the highest total contribution and lowest total contribution to the company based on the above information? (Necessary calculations are needed).

(08 Marks)

(iii) Assume that the non-production overhead cost is Rs. 8,140 and based on the given demand for products, Calculate the net profit of the company.

(04 marks)

(Total 20 marks)

Question No. 05

S Ltd needs to evaluate several projects using the Net Present Value method (NPV) using a 10% discount rate.

Rs. '000

Investment	Year	A	В	
Initial		400	450	250
Investment		100	750	350
Cash Flows	1	100	130	50
	2	120	130	110
	3	140	130	130
	4	120	130	150
	5	100	150	100

Discount Rate 10%

Year	Discount Factor
0	1
1	0.909
2	0.826
3	0.751
4	0.683
5	0.621

Required,

I) Calculate the Payback Period for each project.

(09 marks)

II) Calculate the Discounted Payback Period for Product "B".

(05 marks)

III) Calculate the Net Present Value (NPV) for project "C" by using the 10% discount rate.

(06 marks)

(Total 20 marks)

PRESENT VALUE TABLE

Present value of \$1, that is $(1+r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods				· · · ·	Into	4 7 .				
(n)	1%	2%	3%	40/		t rates (r)			-	
1	0.990	0.980	0.971	4%	5%	6%	7%	8%	9%	10%
2	0.980	0.961	0.943	0.962	0.952	0.943	0.935	0.926	0.917	0.909
3	0.971	0.942	0.945	0.925	0.907	0.890	0.873	0.857	0.842	0.826
4	0.961	0.924	0.888	0.889	0.864	0.840	0.816	0.794	0.772	0.751
5	0.951	0.906	0.863	0.855	0.823	0.792	0.763	0.735	0.708	0.683
6	0.942	0.888	0.837	0.822	0.784	0.747	0.713	0.681	0.650	0.621
7	0.933	0.871	0.813	0.790	0.746	0705	0.666	0.630	0.596	0.564
8	0.923	0.853	0.789	0.760	0.711	0.665	0.623	0.583	0.547	0.513
9	0.914	0.837	0.766	0.731	0.677	0.627	0.582	0.540	0.502	0.467
10	0.905	0.820	0.744	0.703	0.645	0.592	0.544	0.500	0.460	0.424
11	0.896	0.804	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
12	0.887	0.788	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
13	0.879	0.773	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
14	0.870	0.758	0.661	0.601	0.530	0.469	0.415	0.368	0.326	0.290
15	0.861	0.743	0.642	0.577	0.505	0.442	0.388	0.340	0.299	0.263
16	0.853	0.728	0.623	0.555	0.481	0.417	0.362	0.315	0.275	0.239
17	0.844	0.714	0.605	0.534	0.458	0.394	0.339	0.292	0.252	0.218
18		0.700	0.587	0.513	0.436	0.371	0.317	0.270	0.231	0.198
19	0.828	0.686	0.567	0.494	0.416	0.350	0.296	0.250	0.212	0.180
20	0.820	0.673	_	0.475	0.396	0.331	0.277	0.232	0.194	0.164
		0.013	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods				·	Interes	t vote - (.)				
(n)	11%	12%	13%	14%		t rates (r)				
1	0.901	0.893	0.885		15%	16%	17%	18%	19%	20%
2	0.812	0.797	0.783	0.877	0.870	0.862	0.855	0.847	0.840	0.833
3	0.731	0.712	0.763	0.769	0.756	0.743	0.731	0.718	0.706	0.694
4	0.659	0.636	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
5	0.593	0.567		0.592	0.572	0.552	0.534	0.516	0.499	0.482
6	0.535	0.507	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
7	0.482	0.307	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
8	0.434	0.404	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.335
9	0.391	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	
10	0.352		0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.233
11	0.332	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.209	0.194
12	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162		0.162
13		0.257	0.231	0.208	, 0.187	0.168	0.152	0.102	0.148	0.135
14	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.137	0.124	0.112
15	0.232	0.205	0.181	0.160	0.141	0.125	0.111		0.104	0.093
	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.099	0.088	0.078
16	0.188	0.163	0.141	0.123	0,107	0.093	0.093	0.084	0.079	0.065
17	0.170	0.146	0.125	0.108	0.093	0.080		0.071	0.062	0.054
18	0.153	0.130	0.111	0.095	0.081	0.069	0.069	0.060	0.052	0.045
19	0.138	0.116	0.098	0.083	0.070		0.059	0.051	0.044	0.038
20	0.124	0.104	0.087	0.073	0.070	0.060	0.051	0.043	0.037	0.031
				0.010	0.001	0.051	0.043	0.037	0.031	0.026

