



# SOUTH EASTERN UNIVERSITY OF SRI LANKA

## SECOND YEAR EXAMINATION IN BACHELOR OF BUSINESS ADMINISTRATION / COMMERCE (EXTERNAL) – 2009 / 2010 HELD IN DECEMBER – 2010

### BBA / COM 28 (II) – COST & MANAGEMENT ACCOUNTING - II

Answer All Question. (Calculator can be used)

Time : 03 Hours.

01. The following information relates to the below mentioned projects.

	<u>Projects</u>		
	<u>X</u>	<u>Y</u>	<u>Z</u>
Initial Investment - Rs	850,000	900,000	700,000
Expected life	5 Years	5 years	5 years
Scrap value estimated – Rs	60,000	50,000	40,000
Investment in Second year – Rs	150,000	100,000	-
Investment in Third year – Rs	-	-	200,000
<b>Estimated cash flows :</b>			
Year 1 Rs	150,000	220,000	175,000
Year 2 Rs	290,000	230,000	190,000
Year 3 Rs	240,000	230,000	260,000
Year 4 Rs	220,000	290,000	300,000
Year 5 Rs	300,000	210,000	200,000
Estimated cost of capital	8%	7%	10%

You are required to calculate followings for each projects.

- a) Payback period and ARR
- b) Net Present Value (NPV)
- c) Internal Rate of Return (IRR) using formula.
- d) Which project could be selected and give reasons for your recommendation.

(30 Marks)

02. The standard cost structure for product “p” as follows:  
Standard materials :

					Rs
50 kg	of	A	@	Rs 10 per kg	500,00
30 kg	of	B	@	Rs 8 per kg	240,00
60 kg	of	C	@	Rs 12 per kg	720,00
					-----
Total material Cost					1460.00

## Standard Direct Labour :

Skilled	40	Hrs	@	Rs	20	800.00
Semi – Skilled	30	Hrs	@	Rs	18	540.00
Un – Skilled	50	Hrs	@	Rs	15	750.00

Total Labour Cost 2090.00

Variable over head 450.00

Total standard cost per unit 4000.00

It is proposed to produce 1200 units of “p” in the month of October 2010

## The actual results are :

## Direct Material

		<u>Rs</u>
A	: 54000 kg	594,000
B	: 35000 kg	315,000
C	: 65000 kg	845,000

## Direct Labour :

Skilled	: 38,500 Hrs	847,000
Semi Skilled	: 44,000 Hrs	704,000
Un – Skilled	: 60,500 Hrs	726,000

Variable over head 600,000

-----  
4631,000  
=====

Actual production was 1100 “p” in the month of October 2010.

Using the above information you are required to calculate the following variances :

- a) Material price, Usage, Total cost variances for each materials.
- b) Labour Rate, Efficiency, Total cost variances for each labour.

(20 Marks)

03. a) The sales manager of Mohan & Co. Ltd reports that next year he expects to sell 50,000 units of a certain product.

The production manager consults the store keeper and casts his figures. as follows:

Two kinds of raw materials A and B are required for manufacturing the product. Each unit of the product requires 2 kg of A and 3 kg of B. The estimated opening balances at the commencement of the next year are :

Finished product 10,000 Units  
A 12000kg , B 15000 kg

The desirable closing balances at the end of the next year are :

Finished product , 14000 Units  
A 13000 kg , B 16,000 kg

Draw up a materials purchases budget for the next year.

- b) A department of TEE Ceylon limited attains sales of Rs. 600,000 at 80% of its normal capacity. Its expenses are given below :

<b>Administration Cost :</b>	<b>Rs.</b>
Office salaries	90,000
General expenses	2% of sales
Depreciation	7,500
Rent of rates	8,750

<b>Selling Cost :</b>	
Salaries	8% of Sales
Traveling	2% of Sales
Sales office	1% of Sales
General expenses	1% of Sales

<b>Distribution Cost :</b>	
Wages	15,000
Rent	1% of Sales
Other expenses	4% of Sales

Draw up flexible administration, selling and distribution costs budget, operating at 90% 100% and 110% capacity

(20 Marks)

04. Given below are summarized accounts of Asok ltd. for year 2009 and 2010.

**Balance Sheet (Rs in lakh)**

	<u>2009</u>	<u>2010</u>
<b>Liabilities :</b>		
Share capital	250	250
General reserve	100	172
Debenture	180	150
Term loan	30	30
Creditors	70	56
	-----	-----
	630	658
	=====	=====

<b>Assets :</b>		
fixed assets (cost)	500	500
Less : accumulated depreciation	<u>80</u>	<u>115</u>
Net Fixed Assets	420	385
Cash	55	85
Debtors	65	75
Inventories	90	113
	-----	-----
	630	658
	=====	=====

**Income statement (Rs. In lakh)**

	<u>2009</u>	<u>2010</u>
Net Sales	350	450
Less : Cost of material	90	113
Less : Wages	70	70
	-----	-----
Gross profit	190	267
Less : Selling, general and administration costs	50	60
	-----	-----
Earnings before depreciation, interest and tax	140	207
Less : depreciation	30	35
	-----	-----
Earnings before interest & tax	110	172
Less : interest	25	27
	-----	-----
Earnings before tax	85	145
Less : tax	15	48
	-----	-----
Earnings after tax	70	97
Less : Dividend	25	25
	-----	-----
Retained profit	<u>45</u>	<u>72</u>

**You are required to :**

Compute two ratios from (i) profitability (ii) liquidity (iii) debt ratio (iv) Assets activity ratios for the year 2009 and 2010.

(18 Marks)

05. Compare and contrast the followings :

- i) Fixed budget and flexible budget
- ii) Process costing and standard costing
- iii) Relevant Cost & Irrelevant cost.
- iv) Budget and budgetary control

(12 Marks)

\*\*\*\*\*

**Table A.3** Present Value Interest Factor  $PVIF(r, n) = (1 + r)^{-n}$

Period <i>n</i>	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783
3	0.971	0.924	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.694
4	0.961	0.924	0.889	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.614
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.542
6	0.942	0.888	0.838	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.481
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.424
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.374
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.332
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141
17	0.844	0.714	0.605	0.513	0.436	0.377	0.311	0.270	0.231	0.198	0.170	0.146	0.125
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111
19	0.828	0.686	0.570	0.475	0.396	0.331	0.276	0.232	0.194	0.164	0.138	0.116	0.098
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026

(Contd)

**Table A.3 (Contd)**

Period <i>n</i>	14%	15%	16%	17%	18%	19%	20%	24%	28%	32%	36%	40%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.806	0.781	0.758	0.735	0.714
2	0.769	0.756	0.743	0.731	0.718	0.706	0.694	0.650	0.610	0.574	0.541	0.510
3	0.675	0.658	0.641	0.624	0.609	0.593	0.579	0.524	0.477	0.435	0.398	0.364
4	0.592	0.572	0.552	0.534	0.516	0.499	0.482	0.423	0.373	0.329	0.292	0.260
5	0.519	0.497	0.476	0.456	0.437	0.419	0.402	0.341	0.291	0.250	0.215	0.184
6	0.456	0.432	0.410	0.390	0.370	0.352	0.335	0.275	0.227	0.189	0.158	0.130
7	0.400	0.376	0.354	0.333	0.314	0.296	0.279	0.222	0.178	0.143	0.116	0.091
8	0.351	0.327	0.305	0.285	0.266	0.249	0.233	0.179	0.139	0.108	0.085	0.066
9	0.308	0.284	0.263	0.243	0.226	0.209	0.194	0.144	0.108	0.082	0.063	0.044
10	0.270	0.247	0.227	0.208	0.191	0.176	0.162	0.116	0.085	0.062	0.046	0.033
11	0.237	0.215	0.195	0.178	0.162	0.148	0.135	0.094	0.066	0.047	0.034	0.025
12	0.208	0.187	0.168	0.152	0.137	0.124	0.112	0.076	0.052	0.036	0.025	0.018
13	0.182	0.163	0.145	0.130	0.116	0.104	0.093	0.061	0.040	0.027	0.018	0.013
14	0.160	0.141	0.125	0.111	0.099	0.088	0.078	0.049	0.032	0.021	0.014	0.010
15	0.140	0.123	0.108	0.095	0.084	0.074	0.065	0.040	0.025	0.016	0.010	0.007
16	0.123	0.107	0.093	0.081	0.071	0.062	0.054	0.032	0.019	0.012	0.007	0.005
17	0.108	0.093	0.080	0.069	0.060	0.052	0.045	0.026	0.015	0.009	0.005	0.003
18	0.095	0.081	0.069	0.059	0.051	0.044	0.038	0.021	0.012	0.007	0.004	0.003
19	0.083	0.070	0.060	0.051	0.043	0.037	0.031	0.017	0.009	0.005	0.003	0.002
20	0.073	0.061	0.051	0.043	0.037	0.031	0.026	0.014	0.007	0.004	0.002	0.001
25	0.038	0.030	0.024	0.020	0.016	0.013	0.010	0.005	0.002	0.001	0.000	0.000
30	0.020	0.015	0.012	0.009	0.007	0.005	0.004	0.002	0.001	0.000	0.000	0.000