



**Institute of Human Resource Advancement (IHRA)
University of Colombo, Sri Lanka**

**Master of Science in Service Management Course No.05
2nd Trimester Examination**

(Held in July, 2019)

MSM 5231 – Accounting for Services

Instructions to the Candidates

- (1) This paper consists six (06) questions and seven (07) pages.
- (2) Answer any five (05) questions.
- (3) Write your Index Number on all pages of answer scripts.
- (4) Time allocated for the examination is Three (03) hours.
- (5) Tie up all answer sheets at the end of the examination.
- (6) If a page or a part of this question paper is not printed, please inform the Supervisor immediately.

01.

- a. Is there any difference in management accounting information required by manufacturing organization and service organizations? Explain.

(6 Marks)

- b. Explain the role of Balanced Scorecard as a strategic tool in understanding the relationship between Strategic Management and Strategic Management Accounting.

(6 marks)

- c. "Balanced Scorecard helps to evaluate the performance of a business entity through non-financial measures". Do you agree with this statement? Discuss.

(8 marks)

(Total 20 marks)

02.

Excellent (Pvt) Ltd is one of the leading manufacturing company in Sri Lanka. Followings are the financial details available with "Excellent (Pvt) Ltd" for the financial year 2018/2019.

	2017/2018 (Rs.)	2018/2019 (Rs)
Finished Goods	250,000	210,000
Sales	5,000,000	6,500,000
Raw Material Stock	60,000	70,000
Cost of Sales	2,500,000	3,070,000
Operating Profit/ EBIT	2,400,000	3,430,000
Net Profit after Taxation	1200,000	1,800,000
Trade Receivables	900,000	600,000
Trade Payables	300,000	600,000
Purchases	3,600,000	4,400,000
Prepaid Expenses	360,000	350,000
Accrued Liabilities	385,000	250,000
Stated Capital (Rs.10 each)	6,000,000	6,000,000
12% Debentures Issued	1,500,000	1,000,000
Long term bank loan	1,750,000	1,400,000
Debenture Interest expenses	180,000	120,000
Bank Loan Interest Expense	160,000	130,000
Reserves	1,400,000	1,650,000
Fixed Assets	10,000,000	11,500,000
Ordinary share dividends	475,000	300,000
Market Price per Share	300	325

Note: (Assume that out of sales 75% is on credit basis and out of purchases 80 % is on credit Basis)

- a. Calculate two ratios coming under the following types of ratios for 2018/19 financial year for Excellence Ltd.

- i. Profitability ratios
- ii. Working capital ratios
- iii. Leverage ratios/Solvency ratios

(8 marks)

- b. Comment on the performance of the company for 2018/2019 financial year.

(6 marks)

- c. "Uncertainty is a major factor to be considered in all types of project decisions." Discuss.

(6 Marks)

(Total 20 marks)

03.

- a. "Star Sportswear Ltd. is currently selling 30,000 men's athletic pants annually. Following information was derived from Star Sportswear's books for the year on ending 31st March 2019.

	Rs.
Selling price per unit	60
Variable cost per unit	35
Fixed cost: Office Staff salaries for the year	180,000
Fixed cost: General administrative costs for the year	120,000
Fixed cost: Other costs for the year	60,000

As the accountant of the company, you are required to answer the following questions.

- i. Calculate the breakeven point and margin of safety in sales revenue and number of units sold.
- ii. Assume that 25,000 men's athletic pants were sold in a year. Calculate the net profit for the year.
- iii. If the firm has decided to introduce a selling commission of Rs.5 per unit, how many more pants would be required to be sold in a year to earn a net income of Rs. 35,000.
- iv. Assuming that for the year 2020 an additional executive staff salary of Rs.60,000 is anticipated and price of a pant is likely to be increased by 20% what should be the break-even point in number of units and sales revenue?

(10 marks)

- b. "The break-even chart is an excellent planning device". Explain.

(5 marks)

- c. "Managers will always choose the alternative that maximizes operating income or minimizes costs in the decision model". Do you agree? Explain.

(5 marks)

(Total 20 marks)

04.

- a. Explain the difference between absorption costing and marginal costing.

(5 marks)

- b. Prime Building Consultant (PBC) is a construction consultant company that provide different consultant services and provide different types of building services to the public. Recently they have been asked to quote for a restaurant conversion (RC) and repairing a shopping complex (SC) and have found that they have been winning fewer RC contracts than expected. PBC has a policy to price all jobs at budgeted total cost plus 60%. Overheads cost is currently absorbed on a labour hour basis. PBC is considering switching to activity-based costing (ABC) to absorb overheads as it would reduce the cost associated with RC and hence make them more competitive. You have been provided with following information.

Overhead Category	Annual Overhead Cost Rs. '000
Controllers	135,000
Designers	100,000
Property related	360,000
Total	595,000

Activity Driver	Total Number of Activities Per Year Rs.'000
Site visits	900
Designing documents	450
Labour hours	80,000

A typical RC costs Rs. 50,000 in materials and takes 500 labour hours to complete the restaurant conversion. A shopping complex (SC) needs only one site visit by a controller and needs only one design document to be raised. The typical shopping complex (SC) costs Rs. 80,000 in materials and takes 1000 hours to complete. An SC requires ten site visits and five planning documents. In all cases labour is paid Rs. 750 per hour.

You are required to:

- i. Calculate the cost and quoted price of a RC and of an SC using labour hours to absorb the overheads.
- ii. Calculate the cost and the quoted price of a RC and of an SC using ABC to absorb the overheads.

(15 Marks)

(Total 20 marks)

05.

- a. "The basis of variance analysis is the difference between actuals and some predetermined measure such as a budget, plan or forecast". Explain.

(5 Marks)

- b. Sunshine Company is producing a small unit for a heavy-duty machine used for producing leather products. The manufacturing department of Sunshine Company normally comprises 50 skilled labourers, 30 semi-skilled labourers and 20 unskilled labourers.

They are paid at standard rates per hour as under:

Skilled labour	Rs. 100
Semi-skilled labour	Rs. 80
Unskilled Labour	Rs.60

The manufacturing department produces 3,000 units in a normal working week of 40 hours. During the week ended on 31st March, the manufacturing department consisted of 60 skilled labourers, 25 semi-skilled labourers and 15 unskilled labourers. The actual wages paid was Rs.110, Rs.75 and Rs.65 respectively. 2,500 units were produced. You are required to calculate the following.

- i. Labour rate variance
- ii. Labour mixed variance
- iii. Labour efficiency variance
- iv. Labour cost variance

(10 marks)

- c. An engineering company has three production centres and two service centres. The overhead analysis sheet gives the following overhead costs.

Production Centres		Service Centres	
A	255,000	X	14,0000
B	180,000	Y	80,000
C	95,000		

The expenses of the service centres X and Y are apportioned as below.

	A	B	C	X	Y
X	30%	40%	20%	-	10%
Y	10%	20%	50%	20%	-

Apportion the service centres cost using the simultaneous equation method and calculate total cost of each production centres.

(5 marks)

(Total 20 marks)

06.

- a. What are the factors to be considered before selecting the most appropriate pricing method for a service entity?

(5 marks)

- b. Explain the concept of 'transfer pricing.'

(3 marks)

- c. Capital Arc Ltd has the following information belonging to two investment projects.

	Project P	Project Q
Initial Capital expenditure	(300,000)	(300,000)
Profit (loss) year 1	150,000	80,000
2	125,000	100,000
3	75,000	80,000
4	90,000	100,000
5	75,000	120,000
Estimated resale value at the end of 5 th year	60,000	50,000

Notes: profit is calculated after deducting straight-line depreciation. The cost of capital is 10%

You are required to calculate the following for each project.

- i. Average annual rate of return on average capital invested.
- ii. Payback period
- iii. Net present value
- iv. Explain which project you would recommend for acceptance.

(12 Marks)

(Total 20 marks)

Present Value and Future Value Tables

Table A.3. Present Value Interest Factors for One Dollar Discounted at i Percent for n Periods: $PVIF_{i,n} = 1 / (1 + i)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7892
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8736	0.8577	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6934	0.6504	0.6406	0.5947
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7510	0.7312	0.7118	0.6931	0.6756	0.6585	0.6427	0.5820	0.5345	0.5120	0.4552
4	0.9610	0.9238	0.8985	0.8742	0.8507	0.8281	0.8063	0.7852	0.7648	0.7450	0.7258	0.7072	0.6891	0.6721	0.6561	0.6409	0.5700	0.4996	0.4698	0.3991
5	0.9515	0.9057	0.8826	0.8599	0.8381	0.8170	0.7967	0.7771	0.7581	0.7396	0.7216	0.7041	0.6871	0.6706	0.6546	0.6391	0.5580	0.4641	0.4243	0.2933
6	0.9420	0.8860	0.8655	0.8434	0.8224	0.8021	0.7825	0.7635	0.7450	0.7270	0.7095	0.6925	0.6760	0.6600	0.6445	0.6294	0.5370	0.4271	0.3777	0.2072
7	0.9327	0.8766	0.8575	0.8359	0.8153	0.7956	0.7765	0.7579	0.7397	0.7220	0.7047	0.6878	0.6713	0.6552	0.6396	0.6244	0.5210	0.4041	0.3547	0.1842
8	0.9235	0.8673	0.8495	0.8284	0.8082	0.7890	0.7703	0.7520	0.7341	0.7165	0.6992	0.6822	0.6655	0.6492	0.6333	0.6179	0.5140	0.3891	0.3400	0.1705
9	0.9143	0.8580	0.8415	0.8209	0.8012	0.7824	0.7641	0.7463	0.7287	0.7114	0.6944	0.6776	0.6611	0.6448	0.6288	0.6132	0.5080	0.3841	0.3352	0.1657
10	0.9053	0.8490	0.8338	0.8137	0.7944	0.7760	0.7585	0.7413	0.7243	0.7075	0.6909	0.6745	0.6583	0.6423	0.6265	0.6110	0.5050	0.3811	0.3323	0.1628
11	0.8963	0.8400	0.8259	0.8062	0.7873	0.7693	0.7522	0.7354	0.7187	0.7021	0.6857	0.6694	0.6533	0.6374	0.6217	0.6062	0.5000	0.3761	0.3273	0.1578
12	0.8874	0.8310	0.8170	0.7977	0.7791	0.7615	0.7448	0.7283	0.7119	0.6956	0.6794	0.6633	0.6473	0.6314	0.6157	0.6000	0.4940	0.3701	0.3213	0.1518
13	0.8787	0.8222	0.8083	0.7894	0.7711	0.7538	0.7375	0.7214	0.7054	0.6894	0.6735	0.6577	0.6419	0.6262	0.6105	0.5950	0.4890	0.3651	0.3163	0.1468
14	0.8706	0.8140	0.8002	0.7817	0.7637	0.7466	0.7306	0.7148	0.6990	0.6832	0.6675	0.6518	0.6362	0.6206	0.6051	0.5896	0.4836	0.3597	0.3109	0.1414
15	0.8612	0.8045	0.7908	0.7727	0.7550	0.7382	0.7225	0.7068	0.6912	0.6756	0.6600	0.6445	0.6290	0.6136	0.5982	0.5829	0.4769	0.3530	0.3042	0.1347
16	0.8528	0.7960	0.7824	0.7647	0.7473	0.7310	0.7150	0.6991	0.6834	0.6677	0.6521	0.6366	0.6212	0.6059	0.5906	0.5754	0.4694	0.3455	0.2967	0.1272
17	0.8444	0.7875	0.7740	0.7566	0.7395	0.7236	0.7078	0.6921	0.6765	0.6609	0.6454	0.6300	0.6147	0.5994	0.5842	0.5690	0.4630	0.3391	0.2903	0.1208
18	0.8360	0.7790	0.7656	0.7485	0.7317	0.7160	0.7004	0.6849	0.6694	0.6540	0.6386	0.6233	0.6081	0.5929	0.5778	0.5627	0.4567	0.3328	0.2840	0.1145
19	0.8277	0.7706	0.7573	0.7405	0.7240	0.7085	0.6930	0.6776	0.6622	0.6469	0.6316	0.6164	0.6012	0.5861	0.5710	0.5560	0.4500	0.3261	0.2773	0.1078
20	0.8195	0.7623	0.7491	0.7325	0.7163	0.7009	0.6856	0.6703	0.6550	0.6398	0.6246	0.6095	0.5944	0.5794	0.5644	0.5494	0.4434	0.3195	0.2707	0.1012
21	0.8114	0.7541	0.7410	0.7246	0.7086	0.6934	0.6782	0.6631	0.6480	0.6330	0.6180	0.6031	0.5882	0.5733	0.5584	0.5435	0.4375	0.3136	0.2648	0.0953
22	0.8034	0.7460	0.7330	0.7168	0.7010	0.6859	0.6709	0.6559	0.6410	0.6261	0.6112	0.5964	0.5816	0.5668	0.5520	0.5372	0.4312	0.3073	0.2585	0.0890
23	0.7954	0.7379	0.7250	0.7090	0.6934	0.6785	0.6636	0.6487	0.6339	0.6191	0.6044	0.5897	0.5750	0.5603	0.5456	0.5310	0.4250	0.3011	0.2523	0.0828
24	0.7876	0.7299	0.7171	0.7013	0.6859	0.6712	0.6564	0.6417	0.6270	0.6124	0.5978	0.5832	0.5687	0.5542	0.5397	0.5252	0.4192	0.2953	0.2465	0.0783
25	0.7796	0.7218	0.7091	0.6935	0.6783	0.6637	0.6490	0.6344	0.6198	0.6053	0.5908	0.5764	0.5620	0.5476	0.5332	0.5189	0.4129	0.2890	0.2402	0.0748
30	0.7419	0.6841	0.6715	0.6562	0.6414	0.6268	0.6123	0.5978	0.5834	0.5690	0.5547	0.5404	0.5262	0.5120	0.4979	0.4838	0.3778	0.2539	0.2051	0.0674
35	0.7055	0.6476	0.6352	0.6202	0.6057	0.5913	0.5770	0.5627	0.5485	0.5343	0.5202	0.5061	0.4921	0.4781	0.4641	0.4501	0.3441	0.2202	0.1714	0.0597
40	0.6717	0.6137	0.6014	0.5867	0.5725	0.5584	0.5444	0.5304	0.5164	0.5025	0.4886	0.4747	0.4608	0.4469	0.4330	0.4191	0.3131	0.1892	0.1404	0.0527
50	0.6086	0.5505	0.5383	0.5239	0.5099	0.4960	0.4821	0.4683	0.4545	0.4407	0.4270	0.4133	0.4000	0.3862	0.3725	0.3588	0.2528	0.1289	0.0801	0.0424