

M.Com. (Semester – I) Examination, April 2019
COC103: MANAGERIAL ACCOUNTING (OA-18)

Duration: 3 Hours

Max marks: 60

Instructions: 1) This paper consists of nine questions carrying equal marks.

2) Question no 1 consist of 5 compulsory questions of 2 marks each.

3) Answer any 5 questions from question no 2,3,4,5,6,7,8 and 9.

4) Each question carries 10 marks. Figures to the right indicate marks.

Q1. Answer the following short questions in brief.

(5*2=10)

- What are accounting principles?
- Inventory turnover ratio.
- Define angle of incidence.
- List the various essentials of budgetary control.
- What is trend analysis?

Q2. The following are the summaries of the Balance sheets of ABC Ltd, as at 31st December, 2016 and 2017:

liabilities	2016 (Rs)	2017 (Rs)	Assets	2016 (Rs)	2017 (Rs)
capital	2,30,000	2,30,000	Machinery	52,000	70,000
Profit & Loss A/C	16,000	23,000	Land and buildings	1,50,000	1,50,000
Reserve for contingencies	60,000	60,000	stock	82,000	1,06,000
Depreciation fund	40,000	44,000	Temporary investment	1,10,000	74,000
8% Debentures	90,000	70,000	Sundry debtors	67,000	43,000
Outstanding expenses	13,000	12,000	Cash and bank balance	90,000	90,000
Sundry creditors	1,03,000	96,000	Prepaid expenses	1,000	2,000
Total	5,52,000	5,35,000	Total	5,52,000	5,35,000

The following information concerning the transaction is available:

- 10% dividend was paid in cash.
- New machinery for Rs 30,000 was purchased but old machinery costing Rs 12,000 was sold for RS 4,000, accumulated depreciation was Rs 6,000.
- Rs 20,000, 8% Debentures were redeemed by purchase from open market at Rs 96 for a debenture of Rs 100.
- Rs 36,000 Investment were sold at book value.

You are required to prepare a schedule of changes in working capital and statement showing sources and application of funds. (10 marks)

Q3. The following information is given about M/s S.P. Ltd for the year ending 31st December, 2017.

Particulars	Data
Stock turnover ratio	6 times
Gross profit ratio	20% on sales
sales	Rs 3,00,000
Closing stock is Rs 10,000 more than the opening stock	
Opening creditors	Rs 20,000
Closing creditors	Rs 30,000
Trade debtors at the end	Rs 60,000
Net working capital	Rs 50,000

You are required to compute the following:

- Average stock.
- Purchases.
- Creditors turnover ratio.
- Average payment period.
- Average collection period.

(10 marks)

Q4. In a factory producing two different kinds of articles, the limiting factor is the availability of labour. From the following information, show which product is more profitable:

Particulars	Product A cost per unit	Product B cost per unit
Materials	5.00	5.00
Labour: 6 hours at Re 0.50	3.00	----
3 hours at Re 0.50	----	1.50
Fixed overhead	1.50	0.75
Variable overhead	1.50	1.50
Total cost	11	8.75
Selling price	14	11
profit	3.00	2.25

Maximum capacity per month is 4800 hours. Give proof in support of your answer. (10 marks)

Q5. From the following budget data, forecast the cash position at the end of April, May and June 2018:

Month	Sales RS	Purchases RS	Wages RS	Miscellaneous RS
February, 2018	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional information:

- Sales: 20% realised in the month of sales, discount allowed 2% on cash sales. Balance realised equally in two subsequent months.
- Purchases are paid in the month following the month of supply.
- Wages: 25% paid in arrears following month.
- Miscellaneous expenses: paid a month in arrears.
- Rent: Rs 1000 per month paid quarterly in advance due in April
- Income tax: First instalment of advance tax Rs 25,000 due on or before 15th June.
- Income from investment: Rs 5,000 received quarterly, in April, July etc.
- Cash in hand Rs 5,000 on 1st April, 2018.

(10 marks)

Q6. A Ltd. Furnishes the following income statement for the year ending 31st December 2017, prepared on the basis of conventional accounting. You are required to adjust the same for price level changes under CPP method.

Particulars	Amount RS	Amount RS
Sales		90,000
Less: cost of goods sold		
Opening inventory	8,000	
Add purchases	60,000	
Total	68,000	
Less closing inventory	6,000	62,000
Less expenses		
Wages and salaries		6,000
Other expenses		4,500
Depreciation on building		7,00
Interest		3,00
Net income		16,500
Dividends		4,000
Retained earnings		12,500

Additional information:

a) Index of general price level:

January 1, 2017 100

December 31, 2017 200

Average index 150

b) Interest and dividends are paid on December 31, 2017.

c) Building was purchased when index was 50.

(10 marks)

Q7. How does management accounting differ from financial accounting? What are the limitations of management accounting? (10 marks)

Q8. Write short note on following.

a) Indian Accounting Standard 25

(5 marks)

b) Activity based costing

(5 marks)

Q9.A) "Leasing is beneficial to both, the lessee as well as the lessor". Examine

(5 marks)

B) Explain the advantages and limitations of marginal costing.

(5 marks)

M.Com. (Semester – I) Examination, April 2019
COC111: SECURITY ANALYSIS AND CAPITAL MARKETS (OA-18A)

Duration : 3 Hours

Max. Marks : 60

Instructions: 1) This paper consists of **nine questions** carrying equal marks.

2) Question No. 1 consists of 5 **compulsory** questions of 2 marks each.

3) Answer any 5 questions from question **2,3,4,5,6,7,8** and 9.

4) **Each** question carries 10 marks. Figures to the right indicate marks.

5) Present Value and Logarithm tables will be supplied on request.

1. Answer the following: (5X2=10)
- What is a Trend Reversal?
 - Differentiate between public issue and private issue.
 - What are the functions of Secondary Market?
 - Write in brief about NASDAQ.
 - Calculate the Current Yield of a bond with a face value of Rs. 500 and a coupon rate of 5%, the current market price of the bond is Rs. 450.
2. A) Define risk and distinguish between systematic and unsystematic risk. 5
- B) What are the investor's objectives in investing his funds in the stock market? 5
3. A) How does a technical analysis differ from a fundamental analysis? 5
- B) The following data depicts stock price movements of Tata Motors Ltd for the period 28th August 2018 to 16th September 2018. 5

Date	Price
28-Aug-2018	261.14
29-Aug-2018	266
30-Aug-2018	265.85
31-Aug-2018	263.18
01-Sept-2018	263.10
02-Sept-2018	266.89
03-Sept-2018	266.74
04-Sept-2018	263.46
05-Sept-2018	260.05
06-Sept-2018	264.19
07-Sept-2018	267.10
08-Sept-2018	268.05
09-Sept-2018	269.10
10-Sept-2018	270.14
11-Sept-2018	268.87
12-Sept-2018	265.58
13-Sept-2018	269.01

14-Sept-2018	270.10
15-Sept-2018	268.86
16-Sept-2018	271.15

Compute ROC between the following periods:

- 1). 28/08/2018 – 05/09/2018 and
- 2). 07/09/2018 – 16/09/2018

4. Explain the orders management system at NSE. 10
5. Discuss the various methods of floating a new issue. 10
6. A) X Ltd. currently pays dividend Rs. 2 per share which is expected to grow at an annual rate of 10% for the first 6 years. After 6 years, the growth rate of dividend is assumed to decline linearly to 6%. After 9 years, it will grow at 6% forever. If the rate of return required by the equity investor is 12%. Compute the price for the stock. 5
- B) A 4 year bond with a 6% coupon rate and maturity value of Rs. 100 is currently selling at Rs. 85. 5
- a) What is its yield to maturity?
- b) Can investor buy it?

7. The shares of Star Ltd. are expected to provide the following returns in different scenario.

Scenario	Probability	Expected Return (%)
Recession	0.20	5
Normal	0.30	10
Growth	0.10	10
Peak	0.40	20

You are required to compute the standard deviation of Stock. 5

- B) The following data give the market return and Sky company scrip's return for a particular period.

Index Return	Scrip Return
0.70	0.30
0.50	0.10
0.55	0.15
0.45	0.05
0.50	0.10

What is the beta value of the Sky Company scrip? 5

8. The expected rates of return and their possibilities of occurrence for Stock P and Stock Q are given below: 10

Conditions of Economy	Probability	Return on Stock P (%)	Return on Stock Q (%)
1	0.10	10	15
2	0.50	20	25
3	0.40	30	20

- a) What is the covariance of returns on Stock P and Q?
b) What is the coefficient of correlation between the Stock P and Stock Q?
9. 'Chart patterns are helpful in predicting the stock price movement'. Comment. 10

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M.Com (Semester - I) Examination, April 2019

COC - 213 - PORTFOLIO MANAGEMENT (OA-18A)

Duration: 3 Hours

Max Marks: 60

1. This paper consists of **Nine** questions carrying **Equal** marks.
2. Question No.1 consists of **5 Compulsory** questions of **2 marks each**.
3. Answer **any Five** questions from question 2,3,4,5,6,7,8, and 9.
4. **Each** question carries **10 marks**. Figures to the **right** indicate marks.
5. Present value and Logarithm Tables will be **supplied** on request.

1.	Answer the following short questions:	5 X 2 =10 Marks.																
	A. Define Efficient Frontier.		2															
	B. Distinguish any two points between Capital Market Line and Security Market Line.		2															
	C. What is Market Portfolio?		2															
	D. Systematic Risk Vs. Un-systematic Risk		2															
	E. Estimate the stock return by using the CAPM Model and the Arbitrage Model . The particulars are as follows: The expected return of the market is 15 per cent and equity's beta is 1.2. The risk-free rate of interest is 8 per cent.		2															
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Factor</th> <th style="text-align: center;">Market Price of Risk (%)</th> <th style="text-align: center;">Sensitivity Index</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Inflation</td> <td style="text-align: center;">6</td> <td style="text-align: center;">1.1</td> </tr> <tr> <td style="text-align: center;">Industrial Production</td> <td style="text-align: center;">2</td> <td style="text-align: center;">0.8</td> </tr> <tr> <td style="text-align: center;">Risk Premium</td> <td style="text-align: center;">3</td> <td style="text-align: center;">1.0</td> </tr> <tr> <td style="text-align: center;">Interest Rate</td> <td style="text-align: center;">4</td> <td style="text-align: center;">(-0.9)</td> </tr> </tbody> </table>			Factor	Market Price of Risk (%)	Sensitivity Index	Inflation	6	1.1	Industrial Production	2	0.8	Risk Premium	3	1.0	Interest Rate	4	(-0.9)
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2	A. Explain the significance of Portfolio Diversification with help of Correlation Co-efficiency of Stocks.	5																								
	B. What is Feasible Set of Portfolio? Discuss the significance of Efficient Frontier in selection of Optimum Portfolio.	5																								
3	A. How do you distinguish between Sharpe's Single Index Model and Capital Asset Pricing Model?	5																								
	B. Discuss in brief the significance of Alpha and Beta of a Portfolio under Sharpe's Single Index Model.	5																								
4	A. What is Portfolio Revision? Explain the need for Portfolio Revision.	5																								
	B. Distinguish between Constant Rupee Value Plan and Constant Ratio Plan of Portfolio Revision.	5																								
5-A	<p>The following information is available about the stocks of two companies X and Y:</p> <table border="1" data-bbox="394 873 914 1146"> <thead> <tr> <th colspan="2" data-bbox="576 873 685 905">Stock A</th> </tr> <tr> <th data-bbox="430 915 663 989">Expected Return (%)</th> <th data-bbox="722 905 882 936">Probability</th> </tr> </thead> <tbody> <tr> <td data-bbox="525 999 576 1031">-10</td> <td data-bbox="773 989 838 1020">0.10</td> </tr> <tr> <td data-bbox="532 1041 569 1073">15</td> <td data-bbox="773 1031 838 1062">0.35</td> </tr> <tr> <td data-bbox="532 1083 569 1115">20</td> <td data-bbox="773 1073 838 1104">0.30</td> </tr> <tr> <td data-bbox="532 1125 569 1157">25</td> <td data-bbox="773 1115 838 1146">0.25</td> </tr> </tbody> </table> <table border="1" data-bbox="401 1167 921 1423"> <thead> <tr> <th colspan="2" data-bbox="583 1146 693 1178">Stock B</th> </tr> <tr> <th data-bbox="438 1188 671 1262">Expected Return (%)</th> <th data-bbox="729 1178 889 1209">Probability</th> </tr> </thead> <tbody> <tr> <td data-bbox="532 1272 569 1304">10</td> <td data-bbox="780 1262 845 1293">0.15</td> </tr> <tr> <td data-bbox="532 1314 569 1346">20</td> <td data-bbox="780 1304 845 1335">0.20</td> </tr> <tr> <td data-bbox="532 1356 569 1388">25</td> <td data-bbox="780 1346 845 1377">0.30</td> </tr> <tr> <td data-bbox="532 1398 569 1430">30</td> <td data-bbox="780 1388 845 1419">0.35</td> </tr> </tbody> </table> <p data-bbox="215 1451 1188 1587">The coefficient of correlation between the returns on X and Y is 0.05. A portfolio is constructed by allocating the funds between X and Y in the ratio of 2:3.</p> <p data-bbox="310 1587 722 1619">You are required to calculate:</p> <ol data-bbox="310 1619 867 1703" style="list-style-type: none"> a. The expected return on the portfolio. b. The portfolio risk. 	Stock A		Expected Return (%)	Probability	-10	0.10	15	0.35	20	0.30	25	0.25	Stock B		Expected Return (%)	Probability	10	0.15	20	0.20	25	0.30	30	0.35	5
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5-B	<p>Following is the data regarding six stocks</p> <table border="1" data-bbox="205 317 1170 449"> <tr> <td>Stocks</td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>Return (%)</td> <td>8</td> <td>8</td> <td>12</td> <td>4</td> <td>9</td> <td>8</td> </tr> <tr> <td>Risk (Standard Deviation) (%)</td> <td>4</td> <td>5</td> <td>12</td> <td>4</td> <td>5</td> <td>6</td> </tr> </table> <p>i. Assuming three will have to be selected, state which ones will be selected?</p> <p>ii. Assuming a perfect correlation between stock A and C, show whether is it preferable to invest 75% in A and 25% in C ,or invest 100% in E.</p>	Stocks	A	B	C	D	E	F	Return (%)	8	8	12	4	9	8	Risk (Standard Deviation) (%)	4	5	12	4	5	6	5			
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6-A	<p>The following details are given for X and Y companies 'stocks and the Bombay Sensex for a period of one year. Calculate the Systematic and Unsystematic Risk for the companies stocks. If equal amount of money is allocated for the stocks what would be the portfolio risk?</p> <table border="1" data-bbox="205 915 1170 1184"> <thead> <tr> <th></th> <th>X Stock</th> <th>Y Stock</th> <th>Sensex</th> </tr> </thead> <tbody> <tr> <td>Average Return (%)</td> <td>15</td> <td>25</td> <td>6</td> </tr> <tr> <td>Variance of Return (%)</td> <td>6.3</td> <td>5.86</td> <td>2.25</td> </tr> <tr> <td>β</td> <td>0.71</td> <td>0.685</td> <td></td> </tr> <tr> <td>Correlation Co-efficient</td> <td>0.424</td> <td></td> <td></td> </tr> <tr> <td>Co-efficient of determination (r^2)</td> <td>0.18</td> <td></td> <td></td> </tr> </tbody> </table>		X Stock	Y Stock	Sensex	Average Return (%)	15	25	6	Variance of Return (%)	6.3	5.86	2.25	β	0.71	0.685		Correlation Co-efficient	0.424			Co-efficient of determination (r^2)	0.18			7
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6-B	<p>How many inputs are needed for a portfolio analysis involving 40 securities in the Sharpe Single Index Model and Markowitz Model? List out them and give the reasons for variation of number of inputs.</p>	3																								
7-A	<p>The following is the information regarding the stocks of four companies:</p> <table border="1" data-bbox="380 1461 1016 1667"> <thead> <tr> <th>Stock</th> <th>Expected return</th> <th>Beta</th> </tr> </thead> <tbody> <tr> <td>Gamma</td> <td>12%</td> <td>1.10</td> </tr> <tr> <td>Delta</td> <td>14%</td> <td>0.80</td> </tr> <tr> <td>Epsilon</td> <td>16%</td> <td>1.05</td> </tr> <tr> <td>Kappa</td> <td>18%</td> <td>1.15</td> </tr> </tbody> </table> <p>If the return from gilt-edged securities is 5% and market index is 15%, you are required to:</p> <p>a. Identify the undervalued and overvalued securities.</p> <p>b. Suggest which securities should be bought and which securities should be sold.</p>	Stock	Expected return	Beta	Gamma	12%	1.10	Delta	14%	0.80	Epsilon	16%	1.05	Kappa	18%	1.15	5									
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7-B	<p>If the return on market index $R_m = 18\%$, and the risk free rate of return $R_f = 10\%$, the risk of market index, $\sigma_m = 5\%$.</p> <p>You are required to answer the following</p> <ol style="list-style-type: none"> How would you construct an "efficient portfolio" to produce an expected return of 16% and what would be its risk? Given the above information and fact that investor has personal funds ₹1,00,000 to invest, how would you construct a portfolio giving an expected return on portfolio is 20% and what would be its Risk? 	5																									
8-A	<p>The following information is available regarding four mutual funds:</p> <table border="1" data-bbox="259 814 1100 1182"> <thead> <tr> <th>Funds</th> <th>Risk-Free Rate of Return (%)</th> <th>Portfolio Return (%)</th> <th>Portfolio Risk (%)</th> <th>Portfolio Beta</th> </tr> </thead> <tbody> <tr> <td>TEMPLETON</td> <td>8</td> <td>11</td> <td>15</td> <td>0.90</td> </tr> <tr> <td>SEDARIS</td> <td>8</td> <td>15</td> <td>22</td> <td>0.85</td> </tr> <tr> <td>MARKO</td> <td>8</td> <td>21</td> <td>38</td> <td>1.20</td> </tr> <tr> <td>OMEGA</td> <td>8</td> <td>13</td> <td>23</td> <td>1.15</td> </tr> </tbody> </table> <p>You are required to:</p> <ol style="list-style-type: none"> Rank the above mutual funds based on the Sharpe and Treynor's ratios. Comment on the extent of diversification of these funds based on the ranks found in (a) above. 	Funds	Risk-Free Rate of Return (%)	Portfolio Return (%)	Portfolio Risk (%)	Portfolio Beta	TEMPLETON	8	11	15	0.90	SEDARIS	8	15	22	0.85	MARKO	8	21	38	1.20	OMEGA	8	13	23	1.15	7
Funds	Risk-Free Rate of Return (%)	Portfolio Return (%)	Portfolio Risk (%)	Portfolio Beta																							
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8-B	<p>Consider the following data</p> <table border="1" data-bbox="331 1528 1013 1707"> <thead> <tr> <th>Fund</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>Return (%)</td> <td>14</td> <td>12</td> <td>16</td> <td>10</td> <td>20</td> </tr> <tr> <td>σ (%)</td> <td>6</td> <td>4</td> <td>8</td> <td>6</td> <td>10</td> </tr> <tr> <td>β</td> <td>1.5</td> <td>0.5</td> <td>1.0</td> <td>0.5</td> <td>2.0</td> </tr> </tbody> </table> <p>Based on the Zero-beta CAPM, what is Jensen's differential return for the funds if the return on Zero-beta asset is 4 per cent and Market return is 13 percent?</p>	Fund	A	B	C	D	E	Return (%)	14	12	16	10	20	σ (%)	6	4	8	6	10	β	1.5	0.5	1.0	0.5	2.0	3	
Fund	A	B	C	D	E																						
Return (%)	14	12	16	10	20																						
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9

Determine the equilibrium factor pricing equation using Arbitrage Pricing Model, implied by the following two equilibrium portfolios:

Equilibrium Portfolio	Expected Return (%)	β_p
Gold	14	1.3
Hedge Fund	12	1.1

What are the Arbitrage opportunities if stock in 'J' Fund may be purchased? If so, illustrate the Arbitrage Profits, if stock J is having the following information:

Equilibrium Portfolio	Expected Return (%)	β_p
J	14	1.15

10