Program No. & Name of the Examination	2C00143/SYBCOM(Choice Based) Semester-III
Subject	79306/Financial Accounting and Auditing-Introduction to Management Accounting
DATE OF EXAM	28/03/2019
Question Paper Code	**63774**

Q.1. A. Select the most appropriate answer from the following: (Any 10) **(10)**

1) All of the above
2) Assets & Liabilities
3) Comparative Performance
4) Short term financial position
5) Day to day operations
6) Capital budgeting decisions
7) Presentation of accounting data
8) Profit
9) Trend Analysis
10) Profitability
11) All of the above
12) Recover the original investment

Q1.B.	Rewrite the following statements serially and state whether they are True or False (Any Ten).	**(10)**
	1) Depreciation is a non-cash cost.	True
	2) Provision for contingency is added to net current assets to get working capital requirement.	True
	3) Analysis is a must for interpretation.	True
	4) Current ratio is also known as working capital ratio.	True
	5) Patents & copyrights are intangible assets.	True
	6) Publication of Management Accounting Report is not compulsory.	True
	7) Capital Budgeting decisions are very easy to take.	False
	8) Inadequate working capital increases efficiency of the management.	False
	9) Stock Turnover ratio indicates the speed of collection of debt.	False
	10) In comparative income statement capital employed is considered equal to 100.	False
	11) Calls in arrears is calls in advance.	False
	12) Focus of Management Accounting is on external reporting.	False

Q2. A. Complete the following **Comparative** Income statement of **A Limited**. **(08)**
Each missing figure carries ½ mark

	Particulars	2016-17	2017-18	Absolute Increase / Decrease (Rs.)	Percentage Increase / Decrease (%)
	Sales	5,00,000	10,00,000	5,00,000	**100.00**
Less:	Cost of Goods Sold	3,00,000	5,00,000	**2,00,000**	66.67
	Gross Profit	2,00,000	5,00,000	**3,00,000**	**150.00**
Less:	Operating Expenses				
	Administrative Expenses	20,000	30,000	**10,000**	**50.00**
	Selling Expenses	10,000	20,000	**10,000**	**100.00**
	Finance Expenses	10,000	10,000	**NIL**	**NIL**
	Total Operating Expenses	40,000	60,000	**20,000**	**50.00**
	Operating Profit	1,60,000	4,40,000	**2,80,000**	**175.00**
Less:	Tax @ 50%	80,000	2,20,000	**1,40,000**	175.00
	Net Profit after Tax	80,000	2,20,000	1,40,000	**175.00**

Q.2 B. Complete the following **Common Size** Balance Sheet of **B Limited**. **(07)**

Each missing figure carries ½ mark

Particulars	₹	%
Sources of Funds		
Equity Share Capital	1,00,000	**50.00**
General Reserve	30,000	**15.00**
Fictitious assets not written off	-10,000	**-5.00**
Networth	1,20,000	**60.00**
9% Debentures	80,000	**40.00**
Capital Employed	2,00,000	**100.00**
Application of Funds		
Fixed Assets	70,000	**35.00**
Long term Investments	30,000	**15.00**
Working Capital		
Cash/Bank	65,000	**32.50**
Other Current Assets	60,000	**30.00**
Total Current Assets	1,25,000	**62.50**
Sundry Creditors	-25,000	**-12.50**
Working Capital	1,00,000	**50.00**
Capital Employed	2,00,000	**100.00**

OR

Q.2. Calculate the **Trend Analysis** for the following balance sheet of **C Limited.** **(15)**

Each missing figure carries ½ mark

		Amounts in ₹					
	Particulars	31.03.2016	31.03.2017	31.03.2018	31.03.2016	31.03.2017	31.03.2018
I	Sources of funds						
	Equity share capital	4,50,000	6,00,000	6,00,000	**100**	**133.33**	**133.33**
	10% Debentures	2,00,000	4,00,000	12,00,000	**100**	**200.00**	**600.00**
	Capital Employed	6,50,000	10,00,000	18,00,000	**100**	**153.85**	**276.92**
		-	-				
II	Application of funds						
	Fixed Asset	2,50,000	5,00,000	10,00,000	**100**	**200.00**	**400.00**
	Investments	1,00,000	1,00,000	2,00,000	**100**	**100.00**	**200.00**
	Current Assets						
	Bank	4,00,000	5,00,000	2,00,000	**100**	**125.00**	**50.00**
	Other Current Assets	80,000	20,000	5,00,000	**100**	**25.00**	**625.00**
	Total Current Assets	4,80,000	5,20,000	7,00,000	**100**	**108.33**	**145.83**
Less:	Current Liabilities	1,80,000	1,20,000	1,00,000	**100**	**66.67**	**55.56**
	Working Capital	3,00,000	4,00,000	6,00,000	**100**	**133.33**	**200.00**
	Capital Employed	6,50,000	10,00,000	18,00,000	100	153.85	276.92

Q. 3 Following is the information extracted from the books of **M Ltd**. Compute **Ratios**. **(15)**

1. Debt- Equity Ratio = Debt/Equity = Bank Loan/ Equity Share Capital= 1,00,000/4,00,000 = **0.25:1** **(02 Marks)**
2. Current Ratio = CA/CL = 5,20,000/3,70,000 = **1.41:1** **(02 Marks)**
3. Gross Profit Ratio = GP/Sales*100 = 15,00,000/30,00,000*100 = **50%** **(02 Marks)**
4. Liquid Ratio = QA/QL = CA-Stock/ Trade Payables = 20,000/3,70,000 = **0.05:1** **(02 Marks)**
5. Net Profit Ratio = NPAT/Sales*100 = 6,50,000/30,00,000*100 = **21.67%** **(02 Marks)**
6. Stock Turnover Ratio = COGS/Average Stock = 15,00,000/5,00,000 = **3:1** **(02 Marks)**
7. Return on Equity = (NPAT-Pref Divi)/Equity Share Capital*100 = 6,50,000/4,00,000*100 = **162.5%** **(03 Marks)**

OR

Q.3. Following is the Balance Sheet of M/s **N Limited** as on 31st March, 2018. Compute **Ratios**. **(15)**

1. Proprietary Ratio = Net Worth / Total Assets *100 = 13,56,250/21,43,750 = **0.63:1** OR **63%** **(02 Marks)**
2. Net Profit Ratio = NPAT / Sales*100 = 2,62,500/17,50,000*100 = **15%** **(02 Marks)**
3. Quick Ratio = QA/QL = 4,55,000/4,37,500 = **1.04:1** **(02 Marks)**
4. Operating Ratio = (COGS+Operating Expenses) / Sales *100 = **85%** **(03 Marks)**
5. Creditors Turnover Ratio = Credit Purchases/Average Creditors = 8,75,000/1,75,000 = **5 times** **(02 Marks)**
6. Debtors Turnover Ratio = Credit Sales/Average Debtors = (17,50,000-3,50,000) / 3,50,000 = **4 times** **(02 Marks)**
7. Capital Gearing Ratio = Fixed Interest & Dividend bearing Funds/ Equity Shareholders' Funds = 7,00,000/10,06,250 = **0.70:1** OR **70%** **(02 Marks)**

Q.4. Calculate:

1) Discounted Payback Period: **(06 Marks)**

Year	Net Cash Inflow (Rs.)	Discounting Factor @12%	PV of Net Cash Inflow (Can be rounded-off to Rs. 1,00,000 in each case)	Cumulative Cash Inflow (Can be rounded-off)
1	111,995	0.8929	1,00,000.34	1,00,000.34
2	125,439	0.7972	99,999.97	2,00,000.31
3	140,489	0.7118	100,000.07	3,00,000.38
4	157,356	0.6355	99,999.74	4,00,000.12
5	176,243	0.5674	100,000.28	5,00,000.40

1) **Discounted Payback Period = Investment/Annual PV of Cash Flow = 2 years** (Since cost of Machinery Rs. 2,00,000 recovered in second year)

2) Net Present Value: **(03 Marks)**

NPV = PV of Cash Inflow – PV of Cash Outflow = 5,00,000 – 2,00,000 = 3,00,000

3) Profitability Index: **(03 Marks)**

Profitability Index = PV of Cash Inflow / PV of Cash Outflow = 5,00,000 / 2,00,000 = 2.5:1

4) Payback Period: **(03 Marks)**

Payback Period = 1 year for recovery of Rs. 111,995 + {[(2,00,000 – 1,11,995) / 1,25,439]* 12 months}
= 1 year + 8.41 months

OR

Q.4. Using Average Rate of Return method and Payback Period Method analyse which machine should be accepted from Machine A & B.

1) **Average Rate of Return (ARR)** : (**07 Marks**)

	Machine A (₹)		Machine B (₹)	
Year	Net Profit after Tax	Cumulative NPAT	Net Profit after Tax	Cumulative NPAT
1	5,00,000	5,00,000	12,00,000	12,00,000
2	6,00,000	11,00,000	12,00,000	24,00,000
3	7,00,000	18,00,000	15,00,000	39,00,000
4	8,00,000	26,00,000	16,00,000	55,00,000
5	7,00,000	33,00,000	15,00,000	70,00,000

Average Profit After Tax for Machine A = 33,00,000/5 = 6,60,000
Average Profit After Tax for Machine B = 70,00,000/5 =14,00,000
Average Investment for Machine A = 5,00,000
Average Investment for Machine B = 10,00,000
ARR = Average Profit After Tax /Average Investment * 100
ARR for Machine A = 6,60,000/5,00,000*100 = **132%**
ARR for Machine B = 14,00,000/10,00,000*100 = **140%**
Hence, Machine B will be accepted.

2) **Payback Period**: (**08 Marks**)

	Machine A (₹)			Machine B (₹)		
Year	Net Profit after Tax	Depreciation	Cash Inflow	Net Profit after Tax	Depreciation	Cash Inflow
1	5,00,000	2,00,000	7,00,000	12,00,000	4,00,000	16,00,000
2	6,00,000	2,00,000	8,00,000	12,00,000	4,00,000	16,00,000
3	7,00,000	2,00,000	9,00,000	15,00,000	4,00,000	19,00,000
4	8,00,000	2,00,000	10,00,000	16,00,000	4,00,000	20,00,000
5	7,00,000	2,00,000	9,00,000	15,00,000	4,00,000	19,00,000

Machine A
Payback Period = 1 year for recovery of Rs. 7,00,000 + {[(10,00,000 – 7,00,000) / 8,00,000]* 12 months}
= 1 year + 4.5 months
Machine B
Payback Period = 1 year for recovery of Rs. 16,00,000 + {[(20,00,000 – 16,00,000) / 16,00,000]* 12 months}
= 1 year + 3 months

Q.5. **Working Capital of Z Industries**:

Monthly Operations Level = 1,80,000/12 = 15,000 units **(01)**

Particulars	Working (Units*Rate*Credit Period)	RS.	Rs.	Marks
CURRENT ASSETS				
Raw Material	15,000*Rs.20*2 months		6,00,000	**(01)**
WIP:				
Raw Material	15,000*Rs.20*0.5 months	1,50,000		**(01)**
Labour	15,000*Rs.5*0.5 months/2	18,750		**(01)**
Overheads	15,000*Rs15*0.5 months/2	56,250		**(01)**
			2,25,000	**(01)**
Finished Goods	15,000*Rs.40*1 month		6,00,000	**(01)**
Debtors	15,000*Rs.50*2 months*75%		11,25,000	**(01)**
Cash	given		30,000	**(01)**
TOTAL			**25,80,000**	**(01)**
LESS: CURRENT LIABILITIES				
Creditors	15,000*Rs.20*1 month	3,00,000		**(01)**
O/S Wages	15,000*Rs.5*1 month	75,000		**(01)**
O/S Overheads	15,000*Rs.15*0.5 month	1,12,500		**(01)**
			4,87,500	**(01)**
WORKING CAPITAL			**20,92,500**	**(01)**

OR

Q.5. **Working Capital of Y Industries**:

Monthly Operations Level = 3,60,000/12 = 30,000 units **(01)**

Particulars	Working (Units*Rate*Credit Period)	RS.	Rs.	Marks
CURRENT ASSETS				
Raw Material	30,000*Rs.40*2 months		24,00,000	**(01)**
WIP:				
Raw Material	30,000*Rs.40*0.5 months	6,00,000		**(01)**
Labour	30,000*Rs.10*0.5 months/2	75,000		**(01)**
Overheads	30,000*Rs.30*0.5 months/2	2,25,000		**(01)**
			9,00,000	**(01)**
Finished Goods	30,000*Rs.80*1 month		24,00,000	**(01)**
Debtors	30,000*Rs.100*2 months		60,00,000	**(01)**
Cash	given		60,000	**(01)**
TOTAL			**1,17,60,000**	**(01)**
LESS: CURRENT LIABILITIES				
Creditors	30,000*Rs.40*1 months	12,00,000		**(01)**
O/S Wages	30,000*Rs.10* months	3,00,000		**(01)**
O/S Overheads	30,000*Rs.30*0.5 months	4,50,000		**(01)**
			19,50,000	**(01)**
WORKING CAPITAL			**98,10,000**	**(01)**

(For Q.6 the points have been given for reference only. The examiner may give marks using their own discretion.)

Q.6. A. Payback Period and Profitability Index Methods of Capital Budgeting. (**10 Marks**)

Pay back Period:

- The payback period refers to the amount of time it takes to recover the cost of an investment or how long it takes for an investor to hit break-even.
- Account and fund managers use the payback period to determine whether to go through with an investment.
- Shorter paybacks mean more attractive investments while longer payback periods are less desirable.
- The payback period is calculated by dividing the amount of the investment by the annual cash flow.

Pay Back Period= Year before full recovery + (Unrecovered Cash Flow/Cash inflow in the year of full recovery)

Profitability Index Method:

- The profitability index (PI), is a capital budgeting tool that measures the profitability of an investment or project. In layman's terms, it is an indication of the costs and benefits to a business firm if they invest in a particular capital project.
- The profitability index is an appraisal technique applied to potential capital outlays and is a useful tool for ranking projects because it allows you to quantify the amount of value created per unit of investment
- The profitability index is calculated by dividing the present value of future cash flows to be generated by a capital project by the initial cost, or initial investment, of the project. The initial investment is the cash flow required at the start of the project. The future cash flows do not include the initial investment amount.

Profitability Index = Present Value of Future Cash inflows Generated by the Project/Initial Investment in the Project.

Q.6. B. Difference between Financial Accounting and Management Accounting. (**10 Marks**)

Point of Difference	Financial Accounting	Management Accounting
Meaning	Financial Accounting is an accounting system that focuses on the preparation of financial statement of an organization to provide the financial information to the interested parties.	The accounting system which provides relevant information to the managers to make policies, plans and strategies for running the business effectively is known as Management Accounting.
Is it compulsory?	Yes	No
Information	Monetary information only.	Monetary and non-monetary information
Objective	To provide financial information to outsiders.	To assist the management in planning and decision making process by providing detailed information on various matters.
Format	Specified	Not specified
Time Frame	Financial Statements are prepared at the end of the accounting period which is usually one year.	The reports are prepared as per the need and requirements of the organization.
User	Internal and external parties	Only internal management.
Reports	Summarized Reports about the financial position of the organization	Complete and Detailed reports regarding various information.
Publishing and auditing	Required to be published and audited by statutory auditors	Neither published nor audited by statutory auditors.

OR

Q. 6. Short Notes: (Any 4) (05 Marks each)

1. **Functions of a Management Accountant**

a. Planning
b. Controlling
c. Reporting
d. Coordinating
e. Interpreting
f. Evaluation
g. Advising
h. Administration of Tax
i. Government Reporting
j. Appraisal of External Effects
k. Economic Appraisal

2. **Net Present Value**

- Net present value is used in Capital budgeting to analyze the profitability of a project or investment.
- It is calculated by taking the difference between the present value of cash inflows and present value of cash outflows over a period of time.
- As the name suggests, net present value is nothing but net off of the present value of cash inflows and outflows by discounting the flows at a specified rate.
- To derive the present value of the cash flows we need to discount them at a particular rate. This rate is derived considering the return of investment with similar risk or cost of borrowing, for the investment.
- NPV takes into consideration the time value of money. The time value of money simply means that a rupee today is of more value today than it will be tomorrow.

3. **Combined Ratios**

Combined ratios relate to two groups of items of which one is from balance sheet and one from the revenue statements.

- Return on Capital Employed
- Return on Proprietors' fund
- Return on Equity Share Capital
- Debt Service ratio
- Dividend Payout ratio
- Debtors' Turnover Ratio
- Creditors Turnover Ratio

4. **Gross Working Capital**

Gross working capital is the sum of all of a company's current assets (assets that are convertible to cash within a year or less). Gross working capital includes assets such as cash, accounts receivable, inventory, short-term investments and marketable securities. Gross working capital less current liabilities is equal to net working capital, or simply "working capital," a more useful measure for balance sheet analysis.

5. **Current Liabilities and Quick Liabilities.**

Current liabilities are a company's debts or obligations that are due within one year or within a normal operating cycle. Furthermore, current liabilities are settled by the use of a current asset, such as cash, or

by creating a new current liability. Current liabilities appear on a company's balance sheet and include short-term debt, accounts payable, accrued liabilities, and other similar debts.

Quick Liabilities are those current liabilities which mature within a very short period of time and are immediately payable on demand.

6. Operating Expenses

An operating expense is an expense a business incurs through its normal business operations. Often abbreviated as OPEX, operating expenses include rent, equipment, inventory costs, marketing, payroll, insurance, and funds allocated for research and development. One of the typical responsibilities that management must contend with is determining how to reduce operating expenses without significantly affecting a firm's ability to compete with its competitors.

These expenses are usually subdivided into selling expenses and administrative and general expenses. Also called non-manufacturing expenses.