



DETAILED PROJECT REPORT

PEPPERMINT OIL UNIT

UNDER PMFME SCHEME



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Ministry of Food Processing Industries

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1. PROJECT SUMMARY

1. Name of the proposed project	:	Peppermint Oil Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	28500 bottles/annum (40,45,50,55&60% capacity utilization in 1 st to 5 th Year respectively)
4. Raw material	:	Peppermint Shoot (Stem & Leaves).
5. Major product outputs	:	Peppermint Oil
6. Total project cost	:	Rs. 13.71 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 6.45 Lakh
• Miscellaneous Fixed Assets	:	Rs. 2.50 Lakh
• Working capital	:	Rs. 4.76 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 3.13 Lakh
• Promoter's contribution (min10%)	:	Rs. 1.36 Lakh
• Term loan	:	Rs. 4.92 Lakh
• Working Capital Requirement	:	Rs. 4.28 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1 st year	:	Rs. 1.41 Lakh
• 2 nd year	:	Rs. 3.33 Lakh
• 3 rd year	:	Rs. 5.08 Lakh
• 4 th year	:	Rs. 7.08Lakh
• 5 th year	:	Rs. 9.3 5Lakh
11. Average DSCR	:	Rs. 5.06
12. Term loan repayment	:	5 Years with 6 months grace period

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

Peppermint (Japanese Mint-Menta Japonesa), is a medicinal plant that has received more attention from both food and pharmaceutical industries because of its health benefits for human society. Peppermint oil is the essence of peppermint extracted into an oil. Some peppermint oils are stronger than others. The strongest types are made using modern distillation techniques and are called essential oils. Peppermint essential oil is the most common type of peppermint oil available for purchase. It can be used for health, beauty, and cleaning purposes. Peppermint contains a compound called menthol. Menthol is responsible for many of the benefits of peppermint oils. Menthol also gives peppermint its taste, smell, and cooling sensation. Peppermint oil is derived from extraction of oils from leaves and stem (shoot) of peppermint herb. The steam distillation process is used for extraction of oil.

Some people use peppermint oil as part of their beauty and hair care regimen. Its fragrance is pleasant and popularly found in shampoos, skin creams, and other products. While peppermint oil may be known for some skin care benefits, it's also good for your hair and scalp. It may help with dryness, itching, or other scalp problems. Peppermint menthol also imparts a freshened smell and tingly sensation on the skin and scalp. Peppermint oil is used medicines due to its therapeutic benefits. The healthcare uses of peppermint oil include digestive system stimulation and for soothing headaches, muscle pain, cold, sinus etc. They are used extensively in oral care products because of cooling effect and its ability to kill bacteria responsible for bad breath.

2.2. MARKET POTENTIAL:

The rise in demand for aromatherapy treatments is expected to drive the growth of global peppermint oil market. The increasing consumer awareness regarding the use of safe natural and organic products is expected to boost the growth of global peppermint oil market. The overall demand for essential oil has been on the rise over the past few years which is attributable to the rising awareness about the health benefits associated with the product. An ever- increasing global population, rapid urbanisation, a growing pharmaceutical sector, and rising geriatric population are some of the significant factors that are influencing a steady shift in consumer preferences.

2.3. RAW MATERIAL DESCRIPTION:

The only raw material that is required for Peppermint Oil unit is Peppermint Shoot (Stem & Leaves).

3. PROCESS FLOW CHART

The Peppermint Shoots are purchased from farmers and stored temporarily in a shaded area; it acts as a raw material inventory for distillation unit. The steam and water distillation methods are generally employed to perform a simple distillation process.

The Peppermint Shoot are boiled with water in a heating vessel and are boiled for 20 to 40 minutes for optimal extraction, during this period the steam generated carries along with-it Peppermint Oil as it also gets vaporized from within shoot of plant.

This steam is transferred to condenser via steam pipe, as condenser is circulated with cooling water continuously utilizing a pump, thus steam transferred to condenser undergoes condensation completing distillation process, while used cooling water is sent to cooling tower where it undergoes evaporative cooling to lower its temperature and become reusable for cooling.

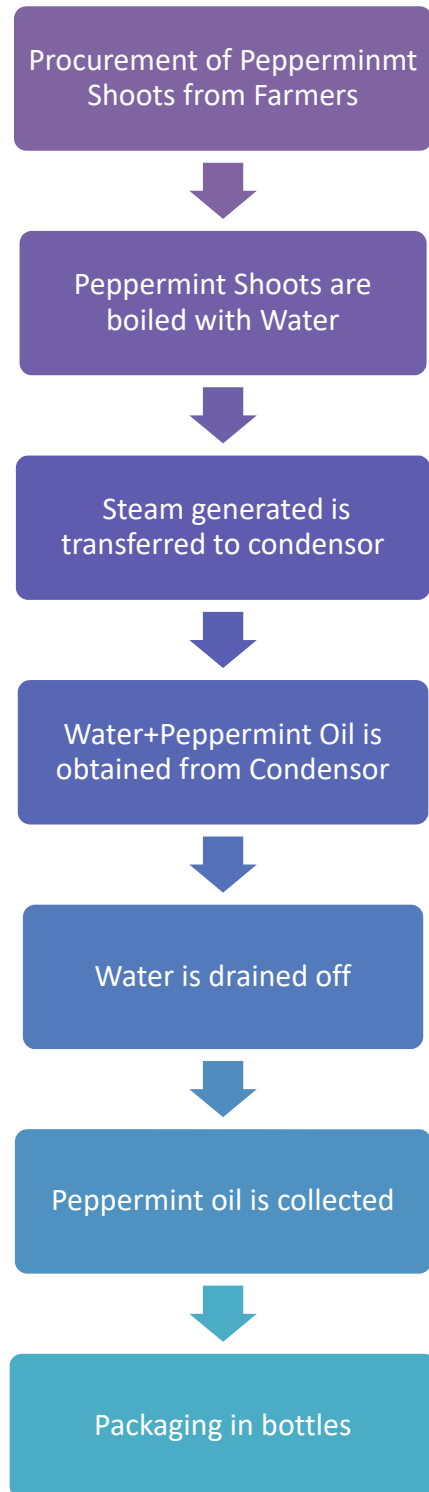
The cooled water in cooling tower sump is replenished periodically with make-up water from another water tank, if required via a make-up water pump to make up for evaporated water in evaporative cooling.

The contents (Water + Peppermint Oil) obtained from condenser are supplied to separator and then the liquid is allowed to settle down and as oil and water are immiscible, water settles below while Peppermint Oil settles above water layer.

A valve is located at bottom of the separator which is used to drain almost all the water from separator, this water is supplied back to heating vessel for enrichment purpose. The enrichment process continues for 20 to 40min, after which most of the Peppermint oil is extracted and it's not feasible to go after the remainder of portion.

Now water is completely drained from separator and oil is supplied to a filling machine. The filling machine fills the Peppermint oil in appropriately sized bottles which can range from 10ml to 500ml and machine setting are made accordingly.

Once Peppermint Oil is filled in bottles they are capped manually or by a capping machine; same goes for Labels, they can either be applied manually or a labelling machine can be used to do so. Followed by which they are filled in cartons and sent for sale.



4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Peppermint Oil is 10 Ltr. per day. First year, Capacity has been taken @ 40%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 7 days and Finished goods Closing Stock has been taken for 7 days.
4. Credit period to Sundry Debtors has been given for 20 days.
5. Credit period by the Sundry Creditors has been provided for 7 days.
6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 6 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

<u>COMPUTATION OF PRODUCTION OF PEPPERMINT OIL</u>		
Items to be Manufactured		
Peppermint Oil		
Total working Hours	8	
Plant capacity Per Day	10	Ltr
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	5%	
Raw material requirement	3000	Ltr
Final Output per annum after wastage	2850	Ltr
Final Product to be packed in 100 ml Bottles		
Number of Bottles per annum	28500	100 ml Bottles

Production of Peppermint Oil		
Production	Capacity	Ltr
1st year	40%	11,400
2nd year	45%	12,825
3rd year	50%	14,250
4th year	55%	15,675
5th year	60%	17,100





Raw Material Cost			
Year	Capacity Utilisation	Rate (per bottle.)	Amount (Rs. in lacs)
1st year	40%	250.00	28.50
2nd year	45%	263.00	33.73
3rd year	50%	276.00	39.33
4th year	55%	290.00	45.46
5th year	60%	305.00	52.16





COMPUTATION OF SALE					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	266	299	333	366
Production	11,400	12,825	14,250	15,675	17,100
Less : Closing Stock	266	299	333	366	399
Net Sale	11,134	12,792	14,217	15,642	17,067
Sale price per bottle	500.00	525.00	551.00	579.00	608.00
Sales (in Lacs)	55.67	67.16	78.33	90.57	103.77

4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 2000-2500 Sq. ft. for smooth production including storage area. It is expected that the premises will be on rental.

4.4. MACHINERY & EQUIPMENTS

Machine Name	Description	Machine Image.
Heating Vessel	Heating Vessel is used to heat the material at required temperature. They are used in many industries.	
Condenser	A condenser is a heat exchanger used to condense a gaseous substance into a liquid state through cooling.	
Steam Pipe	Steam pipe may refer to: A pipe designed to carry pressurized steam from a boiler to the working components, i.e. the steam engine(s) or turbine(s). Such piping usually includes valves to control the routing of the steam, or to stop the flow altogether.	
Separator	The separator, or disc centrifuge, is a vertically arranged centrifuge. It is used for separating and clarifying liquids. In a disk stack separator, solid-liquid mixtures or liquid-liquid mixtures are	

	separated by centrifugal force.	
Cooling Tower	A cooling tower is a specialized heat exchanger in which air and water are brought into direct contact with each other in order to reduce the water's temperature.	
Water Tank	It is used to store water.	
Bottle Filling Machine	This machine is used to fill liquid in desired quantity and minimizes wastage.	
Material handling and other Equipments	These Equipments are used for material handling. Other equipments like water pumps, weighing machine, bucket elevator etc are also used.	

Machine	Unit	Rate	Price
Heating Vessel	1	75000	75000
Condenser	1	70000	70000
Separator	1	15000	15000
Cooling Tower	1	40000	40000
Water Tank	1	15000	15000
Bottle Filling Machine	1	180000	180000
Material handling and other equipment's (Bins, trolley, steam pipe, weighing machine, etc.)	-	250000	250000

Note: Total Machinery cost shall be Rs 6.45 lakh including equipment's but excluding GST and Transportation Cost.

4.5. MISCELLANEOUS FIXED ASSETS

- Water Supply Arrangements
- Furniture & Fixtures
- Computers & Printers

4.6. TOTAL COST OF PROJECT

COST OF PROJECT	
	(in Lacs)
PARTICULARS	Amount
Land & Building	Owned/Rented
Plant & Machinery	6.45
Miscellaneous Assets	2.50
Working capital	4.76
Total	13.71

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	1.36
Subsidy @35%(Max. Rs 10 Lac)	3.13
Term Loan @ 55%	4.92
Working Capital (Bank Finance)	4.28
Total	13.71

4.8. TERM LOAN: Term loan of Rs. 4.92 Lakh is required for project cost of Rs. 13.71 Lakh

4.9. TERM LOAN REPAYMENT& INTEREST SCHEDULE

REPAYMENT SCHEDULE OF TERM LOAN								
							Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance	
1st	Opening Balance							
	1st month	-	4.92	4.92	-	-	4.92	
	2nd month	4.92	-	4.92	0.05	-	4.92	
	3rd month	4.92	-	4.92	0.05	-	4.92	
	4th month	4.92	-	4.92	0.05		4.92	
	5th month	4.92	-	4.92	0.05		4.92	
	6th month	4.92	-	4.92	0.05		4.92	
	7th month	4.92	-	4.92	0.05	0.09	4.83	
	8th month	4.83	-	4.83	0.04	0.09	4.74	
	9th month	4.74	-	4.74	0.04	0.09	4.65	
	10th month	4.65	-	4.65	0.04	0.09	4.56	
	11th month	4.56	-	4.56	0.04	0.09	4.47	
	12th month	4.47	-	4.47	0.04	0.09	4.38	
					0.48	0.55		
2nd	Opening Balance							
	1st month	4.38	-	4.38	0.04	0.09	4.28	
	2nd month	4.28	-	4.28	0.04	0.09	4.19	
	3rd month	4.19	-	4.19	0.04	0.09	4.10	
	4th month	4.10	-	4.10	0.04	0.09	4.01	

PM FME- Detailed Project Report of Peppermint Oil Unit

	5th month	4.01	-	4.01	0.04	0.09	3.92
	6th month	3.92	-	3.92	0.04	0.09	3.83
	7th month	3.83	-	3.83	0.04	0.09	3.74
	8th month	3.74	-	3.74	0.03	0.09	3.65
	9th month	3.65	-	3.65	0.03	0.09	3.56
	10th month	3.56	-	3.56	0.03	0.09	3.46
	11th month	3.46	-	3.46	0.03	0.09	3.37
	12th month	3.37	-	3.37	0.03	0.09	3.28
					0.43	1.09	
3rd	Opening Balance						
	1st month	3.28	-	3.28	0.03	0.09	3.19
	2nd month	3.19	-	3.19	0.03	0.09	3.10
	3rd month	3.10	-	3.10	0.03	0.09	3.01
	4th month	3.01	-	3.01	0.03	0.09	2.92
	5th month	2.92	-	2.92	0.03	0.09	2.83
	6th month	2.83	-	2.83	0.03	0.09	2.73
	7th month	2.73	-	2.73	0.03	0.09	2.64
	8th month	2.64	-	2.64	0.02	0.09	2.55
	9th month	2.55	-	2.55	0.02	0.09	2.46
	10th month	2.46	-	2.46	0.02	0.09	2.37
	11th month	2.37	-	2.37	0.02	0.09	2.28
	12th month	2.28	-	2.28	0.02	0.09	2.19
					0.31	1.09	
4th	Opening Balance						
	1st month	2.19	-		0.02	0.09	2.10

PM FME- Detailed Project Report of Peppermint Oil Unit

				2.19			
2nd month	2.10	-	2.10	0.02	0.09	2.01	
3rd month	2.01	-	2.01	0.02	0.09	1.91	
4th month	1.91	-	1.91	0.02	0.09	1.82	
5th month	1.82	-	1.82	0.02	0.09	1.73	
6th month	1.73	-	1.73	0.02	0.09	1.64	
7th month	1.64	-	1.64	0.02	0.09	1.55	
8th month	1.55	-	1.55	0.01	0.09	1.46	
9th month	1.46	-	1.46	0.01	0.09	1.37	
10th month	1.37	-	1.37	0.01	0.09	1.28	
11th month	1.28	-	1.28	0.01	0.09	1.19	
12th month	1.19	-	1.19	0.01	0.09	1.09	
				0.19	1.09		
5th	Opening Balance						
1st month	1.09	-	1.09	0.01	0.09	1.00	
2nd month	1.00	-	1.00	0.01	0.09	0.91	
3rd month	0.91	-	0.91	0.01	0.09	0.82	
4th month	0.82	-	0.82	0.01	0.09	0.73	
5th month	0.73	-	0.73	0.01	0.09	0.64	
6th month	0.64	-	0.64	0.01	0.09	0.55	
7th month	0.55	-	0.55	0.01	0.09	0.46	
8th month	0.46	-	0.46	0.00	0.09	0.36	
9th month	0.36	-	0.36	0.00	0.09	0.27	
10th month	0.27	-	0.27	0.00	0.09	0.18	
11th month	0.18	-		0.00	0.09	0.09	

			0.18			
12th month	0.09	-	0.09	0.00	0.09	-
				0.07	1.09	
DOOR TO DOOR MORATORIUM PERIOD	60	MONTHS				
	6	MONTHS				
REPAYMENT PERIOD	54	MONTHS				

4.10. WORKING CAPITAL CALCULATIONS

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	1.05	1.21	1.39	1.58	1.78
<u>Raw Material</u>					
	0.67	0.79	0.92	1.06	1.22
Closing Stock	1.71	2.00	2.30	2.64	3.00

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	1.71				
Less : Creditors	0.67				
Paid stock	1.05	10%	0.10	90%	0.94
Sundry Debtors	3.71	10%	0.37	90%	3.34
	4.76		0.48		4.28
MPBF					4.28
WORKING CAPITAL LIMIT DEMAND (from Bank)					4.28
Working Capital Margin					0.48

4.11. SALARY & WAGES

<u>BREAK UP OF LABOUR CHARGES</u>			
Particulars	Wages	No of	Total
	Rs. per Month	Employees	Salary
Plant Operator	15,000	2	30,000
Supervisor	18,000	1	18,000
Skilled (in thousand rupees)	12,000	2	24,000
Unskilled (in thousand rupees)	8,500	2	17,000
Total salary per month			89,000
Total annual labour charges	(in lacs)		10.68

<u>BREAK UP OF STAFF SALARY CHARGES</u>			
Particulars	Salary	No of	Total
	Rs. per Month	Employees	Salary
Administrative Staff	6,500	1	6,500
Manager	18,000	1	18,000
Accountant	15,000	1	15,000
Total salary per month			39,500
Total annual Staff charges	(in lacs)		4.74

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	value	Description
Power connection required	6	KWH
consumption per day	48	units
Consumption per month	1,200	units
Rate per Unit	10	Rs.
power Bill per month	12,000	Rs.

4.13. DEPRECIATION CALCULATION

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	Plant & Machinery	Miss. Assets	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	6.45	2.50	8.95
Total	6.45	2.50	8.95
Less : Depreciation	0.97	0.25	1.22
WDV at end of Year	5.48	2.25	7.73
Additions During The Year	-	-	-
Total	5.48	2.25	7.73
Less : Depreciation	0.82	0.23	1.05
WDV at end of Year	4.66	2.03	6.69
Additions During The Year	-	-	-
Total	4.66	2.03	6.69
Less : Depreciation	0.70	0.20	0.90
WDV at end of Year	3.96	1.82	5.78
Additions During The Year	-	-	-
Total	3.96	1.82	5.78
Less : Depreciation	0.59	0.18	0.78
WDV at end of Year	3.37	1.64	5.01
Additions During The Year	-	-	-
Total	3.37	1.64	5.01
Less : Depreciation	0.51	0.16	0.67
WDV at end of Year	2.86	1.48	4.34

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 2.5% of Gross Sale.

4.15. PROJECTIONS OF PROFITABILITY ANALYSIS

PROJECTED PROFITABILITY STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	40%	45%	50%	55%	60%
<u>SALES</u>					
Gross Sale					
Peppermint Oil	55.67	67.16	78.33	90.57	103.77
Total	55.67	67.16	78.33	90.57	103.77
<u>COST OF SALES</u>					
Raw Material Consumed	28.50	33.73	39.33	45.46	52.16
Electricity Expenses	1.44	1.66	1.90	2.19	2.41
Depreciation	1.22	1.05	0.90	0.78	0.67
Wages & labour	10.68	11.75	12.92	14.22	15.35
Repair & maintenance	1.39	1.68	1.96	2.26	2.59
Packaging	1.67	2.01	2.35	2.72	3.11
Cost of Production	44.90	51.87	59.37	67.62	76.29
Add: Opening Stock /WIP	-	1.05	1.21	1.39	1.58
Less: Closing Stock /WIP	1.05	1.21	1.39	1.58	1.78
Cost of Sales	43.85	51.71	59.19	67.43	76.09
GROSS PROFIT	11.82	15.44	19.14	23.14	27.68
	21.23%	23.00%	24.44%	25.55%	26.67%
Salary to Staff	4.74	5.78	7.18	7.90	8.85
Interest on Term Loan	0.48	0.43	0.31	0.19	0.07
Interest on working Capital	0.47	0.47	0.47	0.47	0.47
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	1.11	1.48	1.57	2.01	2.33
TOTAL	10.41	12.12	13.88	15.36	16.99
NET PROFIT	1.41	3.33	5.26	7.78	10.69
	2.53%	4.95%	6.71%	8.59%	10.30%
Taxation	-	-	0.18	0.70	1.34
PROFIT (After Tax)	1.41	3.33	5.08	7.08	9.35

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	55.67	67.16	78.33	90.57	103.77
Less : Op. WIP Goods	-	1.05	1.21	1.39	1.58
Add : Cl. WIP Goods	1.05	1.21	1.39	1.58	1.78
Total Sales	56.72	67.32	78.51	90.76	103.97
Variable & Semi Variable Exp.					
Raw Material Consumed	28.50	33.73	39.33	45.46	52.16
Electricity Exp/Coal Consumption at 85%	1.22	1.41	1.62	1.86	2.05
Wages & Salary at 60%	9.25	10.52	12.06	13.27	14.52
Selling & administrative Expenses 80%	0.89	1.18	1.25	1.61	1.87
Interest on working Capital	0.471139	0.471139	0.471139	0.471139	0.471139
Repair & maintenance	1.39	1.68	1.96	2.26	2.59
Packaging	1.67	2.01	2.35	2.72	3.11
Total Variable & Semi Variable Exp	43.40	51.00	59.04	67.65	76.77
Contribution	13.32	16.32	19.46	23.11	27.20
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.22	0.25	0.29	0.33	0.36
Wages & Salary at 40%	6.17	7.01	8.04	8.85	9.68
Interest on Term Loan	0.48	0.43	0.31	0.19	0.07
Depreciation	1.22	1.05	0.90	0.78	0.67
Selling & administrative Expenses 20%	0.22	0.30	0.31	0.40	0.47
Rent	3.60	3.96	4.36	4.79	5.27
Total Fixed Expenses	11.91	12.99	14.20	15.33	16.51
Capacity Utilization	40%	45%	50%	55%	60%
OPERATING PROFIT	1.41	3.33	5.26	7.78	10.69
BREAK EVEN POINT	36%	36%	36%	36%	36%
BREAK EVEN SALES	50.71	53.59	57.29	60.21	63.12

4.17. PROJECTED BALANCE SHEET

PROJECTED BALANCE SHEET					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		3.90	4.93	6.01	7.59
Add:- Own Capital	1.36				
Add:- Retained Profit	1.41	3.33	5.08	7.08	9.35
Less:- Drawings	2.00	2.30	4.00	5.50	7.50
Subsidy/grant	3.13				
Closing Balance	3.90	4.93	6.01	7.59	9.43
Term Loan	4.38	3.28	2.19	1.09	-
Working Capital Limit	4.28	4.28	4.28	4.28	4.28
Sundry Creditors	0.67	0.79	0.92	1.06	1.22
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	13.63	13.78	14.00	14.75	15.80
<u>Assets</u>					
Fixed Assets (Gross)	8.95	8.95	8.95	8.95	8.95
Gross Dep.	1.22	2.26	3.17	3.94	4.61
Net Fixed Assets	7.73	6.69	5.78	5.01	4.34
Current Assets					
Sundry Debtors	3.71	4.48	5.22	6.04	6.92
Stock in Hand	1.71	2.00	2.30	2.64	3.00
Cash and Bank	0.47	0.62	0.69	1.06	1.54
TOTAL :	13.63	13.78	14.00	14.75	15.80

4.18. CASH FLOW STATEMENT

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.36				
Net Profit	1.41	3.33	5.26	7.78	10.69
Depriciation & Exp. W/off	1.22	1.05	0.90	0.78	0.67
Increase in Cash Credit	4.28	-	-	-	-
Increase In Term Loan	4.92	-	-	-	-
Increase in Creditors	0.67	0.12	0.13	0.14	0.16
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	3.13				
TOTAL :	17.39	4.60	6.39	8.82	11.65
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	8.95				
Increase in Stock	1.71	0.28	0.31	0.34	0.36
Increase in Debtors	3.71	0.77	0.75	0.82	0.88
Repayment of Term Loan	0.55	1.09	1.09	1.09	1.09
Drawings	2.00	2.30	4.00	5.50	7.50
Taxation	-	-	0.18	0.70	1.34
TOTAL :	16.92	4.44	6.32	8.45	11.17
Opening Cash & Bank Balance	-	0.47	0.62	0.69	1.06
Add : Surplus	0.47	0.15	0.07	0.37	0.48
Closing Cash & Bank Balance	0.47	0.62	0.69	1.06	1.54

4.19. DEBT SERVICE COVERAGE RATIO

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	2.63	4.37	5.98	7.85	10.02
Interest on Term Loan	0.48	0.43	0.31	0.19	0.07
Total	3.11	4.80	6.29	8.04	10.08
<u>REPAYMENT</u>					
Instalment of Term Loan	0.55	1.09	1.09	1.09	1.09
Interest on Term Loan	0.48	0.43	0.31	0.19	0.07
Total	1.03	1.52	1.40	1.28	1.16
DEBT SERVICE COVERAGE RATIO	3.02	3.16	4.49	6.28	8.70
AVERAGE D.S.C.R.	5.06				