## PROJECT REPORT

## Of

## OFFSET PRINTING

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Offset Printing Unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.
[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

## PROJECT AT A GLANCE



## OFFSET PRINTING



## INTRODUCTION

Offset Printing is the latest method of printing system in any language. The method of printing in earlier days was by rotary printing press in which the matter to be printed was to be first composed manually.

In Offset printing, the matter which is to be printed is fed into the computer and after that with the help of the camera, it is exposed and film is prepared through developer/chemicals and put into Offset printing Machine to take out the print. Offset printing method is the latest one where the quality of printing is very fine in comparison to the previous method.

## MARKET POTENTIAL

Today is the age of technology. Offset Printing Press is the example of new technology. The required material may be printed in minimum time with good accuracy and better quality. Now a days, the number of schools, colleges, offices and other business activities is increasing day by day. They require stationery, books and other printed materials. Therefore, Offset Printing Press has very good scope, particularly in Urban and semi-Urban areas.

## BASIS AND ASSUMPTIONS

i) This report is worked out on the basis of $50 \%$ capacity utilization on Single Shift and 300 working days per annum.
ii) The machinery and equipment are of standard make.
iii) The cost of raw materials and other expenditure is approximate and based on current market rates.
iv) The period for achieving envisaged capacity utilization is estimated to be one year after commencement of production.
v) Interest rate for fixed and working capital has been calculated @ 11\% per annum.
vi) Payback period would commence immediately and the repayment period is estimated at 5 years.

## IMPLEMENTATION SCHEDULE

1. The entrepreneur has to arrive at a decision in order to select this product. The guiding factor in this regard would be the market potential, demand and supply gap and availability of resources. It may take 2 to 3 weeks' time.
2. After selecting the product, the entrepreneur has to get provisional registration from DIC, so that he can apply for allotment of land, power, etc., for which about one-week time is required.
3. In order to obtain financial assistance from the financial Institutions, like Commercial Banks or State Financial Corporations, a detailed Project Report is required to be prepared. On the basis of the report, financial institutions may take 8 to 12 weeks time for sanctioning and disbursing the loan. Accordingly, orders for plant and machinery may be finalized and placed. Simultaneously, order for purchase of raw materials is also to be finalized and recruitment of key staff is to be done. This would require 3 to 4 weeks' time.

## TECHNICAL ASPECTS

## Process of Manufacture

Composing of matter which is to be printed, is done on computer with the help of special Software's such as Corel Draw, Photoshop, MS Office, Page Maker, etc., Thereafter a film is produced with the help of a camera. This film is called negative. The matter, which is to be printed is taken on this film/negative.

The negative and an aluminium plate are put into the printing down frame/exposer. Before starting the exposer, the pre-setting of timer is done in the timer/watch. Generally, it takes approx. 200 seconds for making positive. The time exposer is switched off automatically as soon as positive has been built up. The image of negative is printed on the aluminium plate, which is called positive. After that, the developer is spread on the plate followed by washing with the fresh water. During this process, the matter gets printed on the plate automatically. Thereafter, the aluminium plate is fitted in the offset printing press. This plate is called P.S. Plate, when it is used for first time and thereafter it is called Y-pon Plate. The papers are cut on Paper Cutting Machine. Then the papers are fed one by one into Offset Printing Press. Generally, the capacity of offset printing press is 4000 impressions per hour.

## Quality Control and Standards

As per Customers' requirements.

## Pollution Control

The manufacturing activity does not pose any pollution as such no special pollution measures are required.

## Energy Conservation

Wastage of energy should be minimised as much as possible so that the unit can withstand competition with similar unit.

## PROJECTED BALANCE SHEET

| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOURCES OFFUND |  |  |  |  |  |
| Capital Account | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Retained Profit | 2.29 | 5.32 | 9.95 | 15.47 | 22.26 |
| Term Loan | 5.00 | 3.75 | 2.50 | 1.25 | - |
| Cash Credit | 2.65 | 2.65 | 2.65 | 2.65 | 2.65 |
| Sundry Creditors | 0.17 | 1.00 | 1.17 | 1.34 | 1.50 |
| TOTAL: | 11.10 | $13.71$ | 17.25 | 21.69 | 27.40 |
| APPLICATION OF FUND |  |  |  |  |  |
| Fixed Assets ( G ross) | 6.95 | 6.95 | 6.95 | 6.95 | 6.95 |
| Gross Dep. | 1.00 | 1.87 | 2.61 | 3.25 | 3.79 |
| Net Fixed Assets | 5.95 | 5.08 | 4.34 | 3.70 | 3.16 |
| Current Assets |  |  |  |  |  |
| Sundry Debtors | 1.71 | 2.09 | 2.44 | 2.79 | 3.14 |
| Stock in Hand | 1.40 | 1.68 | 1.96 | 2.24 | 2.52 |
| Cash and Bank | 2.04 | 4.86 | 8.51 | 12.95 | 18.57 |
| TOTAL: | 11.10 | 13.71 | 17.25 | 21.69 | 27.40 |


| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOURCES OFFUND |  |  |  |  |  |
| Share Capital | 0.99 | - |  |  |  |
| Reserve \& Surplus | 2.29 | 3.03 | 4.63 | 6.13 | 7.54 |
| Depriciation \& Exp. W/ off | 1.00 | 0.87 | 0.74 | 0.63 | 0.54 |
| Increase in Cash Credit | 2.65 | - | - | - | - |
| Increase In Term Loan | 6.26 | - | - | - | - |
| Increase in Creditors | 0.17 | 0.84 | 0.17 | 0.17 | 0.17 |
| total: | $13.35$ | 4.74 | 5.54 | 6.93 | 8.25 |
| APPLICATION OFFUND |  |  |  |  |  |
| Increase in Fixed Assets | 6.95 | - | - | - | - |
| Increase in Stock | 1.40 | 0.28 | 0.28 | 0.28 | 0.28 |
| Increase in Debtors | 1.71 | 0.38 | 0.35 | 0.35 | 0.35 |
| Repayment of Term Loan | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Taxation | - | - | - | 0.61 | 0.75 |
| TOTAL: | 11.31 | 1.91 | 1.88 | 2.49 | 2.64 |
| Opening Cash \& Bank Balance | - | 2.04 | 4.86 | 8.51 | 12.95 |
| Add : Surplus | 2.04 | 2.82 | 3.66 | 4.44 | 5.62 |
| Closing Cash \& Bank Balance | 2.04 | 4.86 | 8.51 | 12.95 | 18.57 |


| PROJECTED PROFITABILITY STATEMENT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| Capacity Ulisation \% |  |  |  |  |  |
| A) SALES |  |  |  |  |  |
| Gross Sale(Offset Printing) | 73.25 | 89.65 | 104.65 | 119.65 | 134.65 |
| Total (A) | 73.25 | 89.65 | 104.65 | 119.65 | 134.65 |
| B) COST OF SALES |  |  |  |  |  |
| Raw Materal Consumed | 49.81 | 60.07 | 70.12 | 80.17 | 90.22 |
| Elecricity Expenses | 1.47 | 1.79 | 2.09 | 2.39 | 2.69 |
| Repair \& M aintenance | 0.73 | 1.79 | 2.09 | 2.39 | 2.69 |
| Labour \& Wages | 5.28 | 5.81 | 6.39 | 7.03 | 7.73 |
| Depreciation | 1.00 | 0.87 | 0.74 | 0.63 | 0.54 |
| Cost of Production | 58.29 | 70.33 | 81.43 | 92.61 | 103.87 |
| Add: Opening Stock /WIP | - | 1.40 | 1.68 | 1.96 | 2.24 |
| Less: Closing Stock /WIP | 1.40 | 1.68 | 1.96 | 2.24 | 2.52 |
| Cost of Sales (B) | 56.89 | 70.05 | 81.15 | 92.33 | 103.59 |
| C) GROSS PROFIT (A-B) | 16.37 | 19.60 | 23.50 | 27.32 | 31.06 |
|  | 22\% | 22\% | 22\% | 23\% | 23\% |
| D) Bank Interest (Term Loan ) | 0.64 | 0.50 | 0.36 | 0.22 | 0.09 |
| Bank Interest ( C.C. Limit) | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| E) Salary to Staff | 2.16 | 2.33 | 2.52 | 2.72 | 2.94 |
| F) Selling \& Adm Expenses Exp. | 10.99 | 13.45 | 15.70 | 17.95 | 20.20 |
| TOTAL (D+E) | 14.08 | 16.57 | 18.87 | 21.18 | 23.51 |
| H) NET PROFIT | 2.29 | 3.03 | 4.63 | 6.13 | 7.54 |
| I) Taxation | - | - | - | 0.61 | 0.75 |
| J) PROFIT (After Tax) | 2.29 | 3.03 | 4.63 | 5.52 | 6.79 |
| K) DIVIDEND | - | - | - | - | - |
| L) RETAINED PROFIT | 2.29 | 3.03 | 4.63 | 5.52 | 6.79 |

## COMPUTATION OF OFFSET PRINTING UNIT

Items to be M anufactured Off set Printing Unit

Booklets

| Manufacturing Capacity | Off set Printing U | 400 |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| No. of Working Hour |  | 10 |  |
|  |  |  |  |
| No of Working Days per month |  | 25 |  |
|  |  |  |  |
| No. of Working Day per annum |  | 300 |  |
|  |  |  |  |
| Total Production per Annum | Off set Printing U | 1,20,000 |  |
|  |  | - |  |
| Year |  | Capacity Utilization |  |
|  |  |  |  |
|  |  | Off set Printing Unit |  |
| IST YEAR |  | 50\% | 60,000.00 |
| IIND YEAR |  | 60\% | 72,000.00 |
| IIIRD YEAR |  | 70\% | 84,000.00 |
| IVTH YEAR |  | 80\% | 96,000.00 |
| VTH YEAR |  | 90\% | 1,08,000.00 |
|  |  |  |  |

COMPUTATION OF SALE

Off set Printing Unit

| Particulars | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Op Stock | - | $1,400.00$ | $1,680.00$ | $1,960.00$ | $2,240.00$ |
| Production | $60,000.00$ | $72,000.00$ | $84,000.00$ | $96,000.00$ | $1,08,000.00$ |
|  | $60,000.00$ | $73,400.00$ | $85,680.00$ | $97,960.00$ | $1,10,240.00$ |
| Less : Closing Stock | $1,400.00$ | $1,680.00$ | $1,960.00$ | $2,240.00$ | $2,520.00$ |
| Net Sale | $58,600.00$ | $71,720.00$ | $83,720.00$ | $95,720.00$ | $1,07,720.00$ |
|  |  |  |  |  |  |
| Sale Price Per Booklet | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 |
|  |  |  |  |  |  |
| Sale (in Lacs) | $\mathbf{7 3 . 2 5}$ | $\mathbf{8 9 . 6 5}$ | $\mathbf{1 0 4 . 6 5}$ | $\mathbf{1 1 9 . 6 5}$ | $\mathbf{1 3 4 . 6 5}$ |
|  |  |  |  |  |  |

COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL

| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Stock of Consumables | 1.40 | 1.68 | 1.96 |  |  |  |
| (15 Days requirement) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | $\mathbf{1 . 4 0}$ | $\mathbf{1 . 6 8}$ | $\mathbf{1 . 9 6}$ |  |  |  |
|  | $\mathbf{2 . 2 4}$ | $\mathbf{2 . 5 2}$ |  |  |  |  |

COMPUTATION OF WORKING CAPITAL REQUIREMENT


BREAK UP OF LABOUR

| Particulars |  | Wages | No of | Total |
| :--- | ---: | :---: | :---: | :---: |
|  |  | Per Month | Employees | Salary |
|  |  |  |  |  |
| Skilled Worker |  | $10,000.00$ | 2 | $20,000.00$ |
| Unskilled Worker |  | $6,000.00$ | 4 | $24,000.00$ |
|  |  |  |  |  |
|  |  |  |  | $44,000.00$ |
|  |  |  |  |  |
|  |  |  |  |  |
| Annual Cost (in lacs) |  |  |  |  |

## BREAK UP OF SALARY

| Particulars |  | Salary | No of | Total |
| :--- | :--- | ---: | ---: | ---: |
|  |  | Per Month | Employees | Salary |
| Accountant |  | $10,000.00$ | 1 | $10,000.00$ |
| Marketing Executive |  | $8,000.00$ | 1 | $8,000.00$ |
|  |  |  |  |  |
|  |  |  |  | $18,000.00$ |
| Total Salary Per Month |  |  |  |  |
|  |  |  |  |  |
| Annual Cost ( in lacs) |  |  |  |  |

## COMPUTATION OF DEPRECIATION

| Description | Land | Plant \& | Furniture | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Machinery |  |  |
|  |  |  |  |  |
| Rate of Depreciation |  | 15.00\% | 10.00\% |  |
| Opening Balance | Leased | - | - | - |
| Addition | - | 6.50 | 0.45 | 6.95 |
|  | - | 6.50 | 0.45 | 6.95 |
| Less: Depreciation | - | 0.98 | 0.02 | 1.00 |
| WDV at end of Ist year | - | 5.53 | 0.43 | 5.95 |
| Additions During The Year | - | - | - | - |
|  | - | 5.53 | 0.43 | 5.95 |
| Less: Depreciation | - | 0.83 | 0.04 | 0.87 |
| WDV at end of IInd Year | - | 4.70 | 0.38 | 5.08 |
| Additions During The Year | - | - | - | - |
|  | - | 4.70 | 0.38 | 5.08 |
| Less : Depreciation | - | 0.70 | 0.04 | 0.74 |
| WDV at end of IIIrd year | - | 3.99 | 0.35 | 4.34 |
| Additions During The Year | - | - | - | - |
|  | - | 3.99 | 0.35 | 4.34 |
| Less : Depreciation | - | 0.60 | 0.03 | 0.63 |
| WDV at end of IV year | - | 3.39 | 0.31 | 3.70 |
| Additions During The Year | - | - | - | - |
|  | - | 3.39 | 0.31 | 3.70 |
| Less : Depreciation | - | 0.51 | 0.03 | 0.54 |
| WDV at end of Vth year | - | 2.88 | 0.28 | 3.16 |


| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  | 11\% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | CI Balance |
| IST YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 6.26 | - | 6.26 | 0.17 | 0.31 | 5.94 |
|  | lind Quarter | 5.94 | - | 5.94 | 0.16 | 0.31 | 5.63 |
|  | IIIrd Quarter | 5.63 | - | 5.63 | 0.15 | 0.31 | 5.32 |
|  | Ivth Quarter | 5.32 | - | 5.32 | 0.15 | 0.31 | 5.00 |
|  |  |  |  |  | 0.64 | 1.25 |  |
| IIND YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 5.00 | - | 5.00 | 0.14 | 0.31 | 4.69 |
|  | lind Quarter | 4.69 | - | 4.69 | 0.13 | 0.31 | 4.38 |
|  | IIIrd Quarter | 4.38 | - | 4.38 | 0.12 | 0.31 | 4.07 |
|  | Ivth Quarter | 4.07 |  | 4.07 | 0.11 | 0.31 | 3.75 |
|  |  |  |  |  | 0.50 | 1.25 |  |
| IIIRD YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 3.75 | - | 3.75 | 0.10 | 0.31 | 3.44 |
|  | lind Quarter | 3.44 | - | 3.44 | 0.09 | 0.31 | 3.13 |
|  | IIIrd Quarter | 3.13 | - | 3.13 | 0.09 | 0.31 | 2.81 |
|  | Ivth Quarter | 2.81 |  | 2.81 | 0.08 | 0.31 | 2.50 |
|  |  |  |  |  | 0.36 | 1.25 |  |
| IVTH YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 2.50 | - | 2.50 | 0.07 | 0.31 | 2.19 |
|  | lind Quarter | 2.19 | - | 2.19 | 0.06 | 0.31 | 1.88 |
|  | IIIrd Quarter | 1.88 | - | 1.88 | 0.05 | 0.31 | 1.56 |
|  | Ivth Quarter | 1.56 |  | 1.56 | 0.04 | 0.31 | 1.25 |
|  |  |  |  |  | 0.22 | 1.25 |  |
| VTH YEAR | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 1.25 | - | 1.25 | 0.03 | 0.31 | 0.94 |
|  | lind Quarter | 0.94 | - | 0.94 | 0.03 | 0.31 | 0.63 |
|  | IIIrd Quarter | 0.63 | - | 0.63 | 0.02 | 0.31 | 0.31 |
|  | Ivth Quarter | 0.31 |  | 0.31 | 0.01 | 0.31 - | 0.00 |
|  |  |  |  |  | 0.09 | 1.25 |  |

## CALCULATION OF D.S.C.R

| PARTICULARS | IST YEAR | IIND YEAR | IIIRD YEAR | IVTH YEAR | VTH YEAR |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| CASH ACCRUALS | 3.29 | 3.90 | 5.37 | 6.15 | 7.33 |
|  |  |  |  |  |  |
| Interest on Term Loan | 0.64 | 0.50 | 0.36 | 0.22 | 0.09 |
|  |  |  |  |  |  |
| Total | 3.92 | 4.40 | 5.73 | 6.38 | 7.42 |
|  |  |  |  |  |  |
| REPAYMENT |  |  |  |  |  |
| Instalment of Term Loan | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Interest on Term Loan | 0.64 | 0.50 | 0.36 | 0.22 | 0.09 |
|  |  |  |  |  |  |
| Total | 1.89 | 1.75 | 1.61 |  | 1.47 |
|  |  |  |  |  | 1.34 |
| DEBT SERVICE COVERAGE RATIO | $\mathbf{2 . 0 8}$ | $\mathbf{2 . 5 1}$ | $\mathbf{3 . 5 5}$ |  | $\mathbf{4 . 3 2}$ |
|  |  |  |  |  | $\mathbf{5 . 5 5}$ |
| AVERAGE D.S.C.R. |  |  | $\mathbf{3 . 6 0}$ |  |  |

BREAK EVEN POINT ANALYSIS

| Year | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Net Sales \& Other Income | 73.25 | 89.65 | 104.65 | 119.65 | 134.65 |
| Less : Op. WIP Goods |  | 1.40 | 1.68 | 1.96 | 2.24 |
| Add: Cl. WIP Goods | 1.40 | 1.68 | 1.96 | 2.24 | 2.52 |
| Total Sales | 74.65 | 89.93 | 104.93 | 119.93 | 134.93 |
| Variable \& Semi Variable Exp. |  |  |  |  |  |
| Raw Material \& Tax | 49.81 | 60.07 | 70.12 | 80.17 | 90.22 |
| Electricity Exp/ Coal Consumption at 85\% | 1.25 | 1.52 | 1.78 | 2.03 | 2.29 |
| Wages \& Salary at 60\% | 4.46 | 4.88 | 5.34 | 5.85 | 6.40 |
| Repair \& Maintenance | 0.73 | 1.79 | 2.09 | 2.39 | 2.69 |
| Selling \& adminstrative Expenses 80\% | 8.79 | 10.76 | 12.56 | 14.36 | 16.16 |
| Intt. On Working Capital Loan | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Total Variable \& Semi Variable Exp | 65.33 | 79.32 | 92.18 | 105.09 | 118.05 |
| Contribution | 9.32 | 10.61 | 12.75 | 14.84 | 16.88 |
| Fixed \& Semi Fixed Expenses |  |  |  |  |  |
|  |  |  |  |  |  |
| Electricity Exp/ Coal Consumption at 15\% | 0.22 | 0.27 | 0.31 | 0.36 | 0.40 |
| Wages \& Salary at 40\% | 2.98 | 3.26 | 3.56 | 3.90 | 4.27 |
| Interest on Term Loan | 0.64 | 0.50 | 0.36 | 0.22 | 0.09 |
| Depreciation | 1.00 | 0.87 | 0.74 | 0.63 | 0.54 |
| Selling \& adminstrative Expenses 20\% | 2.20 | 2.69 | 3.14 | 3.59 | 4.04 |
| Total Fixed Expenses | 7.03 | 7.59 | 8.12 | 8.70 | 9.34 |
| Capacity Utilization | 50\% | 60\% | 70\% | 80\% | 90\% |
| OPERATING PROFIT | 2.29 | 3.03 | 4.63 | 6.13 | 7.54 |
| BREAK EVEN POINT | 38\% | 43\% | 45\% | 47\% | 50\% |
| BREAK EVEN SALES | 56.30 | 64.27 | 66.84 | 70.35 | 74.63 |

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