

HI-TECH PROJECTS

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PROFITABLE INDUSTRIES FOR YOU

STEEL DOORS AND FRAMES MANUFACTURING [3356]

Doors may be defined as an openable barrier secured in a wall opening. It is provided to give an access to inside of a room. The door is the main part of the building which provides safety and privacy. Different varieties of doors are available according to the material, manufacturer, etc. There are different types of doors like flush doors, sliding doors, revolving doors, collapsible doors, rolling shutter doors, etc. A steel door allow us opening or passage into a house, building, room, apartment or closet by which persons enter. It is more strong other than normal wood door or others type of doors. Steel Doors. Steel or other such metal construction has been used for years as they are efficient and are a sturdy option for exterior and interior doors alike. These doors can be either be solid or hollow. It has been found to be a good substitute for wood and is being used extensively for making frames. The frames can be made out of angles, Tee, channels or pressed steel plates. Holdfasts and hinges are normally welded to the frame in case of steel frames. Normal shutters made out of wood etc can be fixed on these steel frames. Steel frames are quite popular and are being used extensively for houses and other locations as they are economical than the conventional wooden frames. Shutters can also be made out of Mild Steel (MS) sheets, welded or riveted to a frame of angle iron or channel section, properly braced. Steel doors can also be made in high quality in cold rolled mild steel, precision engineered. They are long lasting requiring minimum maintenance. They are available in beautiful shades with various wood grain texturing. These can invariably be used where security is of a greater concern. Steel doors are widely used in houses, apartments and in places where door operating conditions require a higher resistance to loads, mechanical damages and corrosion. The use of metal materials does not preclude the creation of interesting and structurally advanced products. Well integrated doors may constitute an architectural detail that bonds the whole interior. The precision of performance combined with a high-quality powder coating in any color, enables manufacturing of a product adapted to individual needs.

COST ESTIMATION

Plant Capacity	75 Nos/Day
Land & Building	Rented
Plant & Machinery	Rs. 1.01 Cr
W.C. for 3 Months	Rs. 2.07 Cr
Total Capital Investment	Rs. 3.37 Cr
Rate of Return	37%
Break Even Point	56%

FOOTWEAR MANUFACTURING [3357]

Poly Urethane (PU) is a plastic material or polymer consisting of organic units linked by carbamate links. Main sources of its formation include di-isocyanates, tri-isocyanates and polyols, along with these amine catalyst, bio derived material, hydroxyl and amine terminated compounds are used in its formation. Foam and non-foam PU are further modified by using surfactants. Hydrogen bonding also determines the properties of final PU product. The product does not melt when heated, which are known as thermosetting polymers. They are also available as thermoplastic PU.TPU (Thermo Plastic Urethane), for highquality footwear, into the country. This material has better properties than PVC or TPR (conventional materials used for footwear). Footwear is the product to protect human feet from effects of all biological damages. Footwear industry is age old traditional industry in India and it has been changed structurally into different segments like casual-wears, dress-wears and sportswear. New segment is emerging for medical purposes as medical-wear like diabetic footwear. Many companies use to concentrate different segment like men's-wear, women's-wear and children's-wear separately. Footwear industry has been giving considerable amount of employment to the nation especially weaker sections and minority sections of society in India. Population growth, exports, domestic markets are the factors of expansion of footwear industry and creation of employment opportunities in this sector. This case study reveals the production capacities, structure of industry, exports growth, global imports, per capita consumption and estimates of future requirements of human resources in footwear industry in India. The major production of footwear manufacturing concentrated in these centers. • Tamil Nadu - Chennai, Ambur, Ranipet, Vaniyambadi, Trichy, Dindigul. • Maharashtra - Mumbai, • West Bengal - Kolkata, • Uttar Pradesh - Kanpur, Agra & Noida, • Punjab - Jalandhar, Ludhiana, • Karnataka - Bangalore, • Andhra Pradesh - Hyderabad, • Haryana - Ambala, Gurgaon, Panchkula and Karnal, • Delhi and Surroundings. The left and right footwear were identical and hence could be worn on either foot. Only prolonged usage shaped them into right and left boots. The right and left shoes were invented by a fashionable boot maker, William Young from Philadelphia in 1800. The first crafted footwear is the Sandals, which are known to be the successors to these wrappings. The Indian Footwear sector is a promising one with tremendous opportunity for growth both in the international and domestic market. With low production cost, abundant supply of

raw material, evolving retail system, buying patterns and huge consumption market, this sector is posed to grow to great heights. How the Polyurethane is made:- A variety of raw materials are used to produce polyurethanes. These include monomers, prepolymers, stabilizers which protect the integrity of the polymer, and colorants. One of the key reactive materials required to produce polyurethanes are diisocyanates. These compounds are characterized by a (NCO) group, which are highly reactive alcohols. The most widely used isocyanates employed in polyurethane production are toluene diisocyanate (TDI) and polymeric isocyanate (PMDI). TDI is produced by chemically adding nitrogen (/knowledge/Nitrogen.html) groups on toluene, reacting these with hydrogen to produce a diamine, and separating the undesired isomers. PMDI is derived by a phosgenation reaction of aniline formaldehyde polyamines. In addition to these isocyanates, higher end materials are also available. These include materials like 1,5-naphthalene diisocyanate and bitolylenediisocyanate. These more expensive materials can provide higher melting, harder segments in polyurethane elastomers. The other reacting species required to produce polyurethanes are compounds that contain multiple alcohol groups (OH), called polyols. Materials often used for this purpose are polyether polyols, which are polymers formed from cyclic ethers. They are typically produced through an alkylene oxide polymerization process. They are high molecular weight polymers that have a wide range of viscosity. Various polyether polyols that are used include polyethylene (/knowledge/Polyethylene.html) glycol, polypropylene glycol, and polytetramethylene glycol. These materials are generally utilized when the desired polyurethane is going to be used to make flexible foams or thermoset elastomers. Polyester polyols may also be used as a reacting species in the production of polyurethanes. They can be obtained as a by-product of terephthalic acid production. They are typically based on saturated aromatic carboxylic acids and diols. Branched polyester polyols are used for polyurethane foams and coatings. Polyester polyols were the most used reacting species for the production of polyurethanes. However, polyether polyols became significantly less expensive and have supplanted polyester polyols.

COST ESTIMATION

Plant Capacity	11,500 Pair/Day
Land & Building (800sq.mt)	Rs.63.37 Lacs
Plant & Machinery	Rs. 39.20 Lacs
W.C. for 1 Month	Rs. 5.95 Cr
Total Capital Investment	Rs. 7.12 Cr
Rate of Return	70%
Break Even Point	26%

Best Industries to Start and Grow

PU FOOTWEAR MANUFACTURING [3358]

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COST ESTIMATION

Plant Capacity	11,500 Pair/Day
Land & Building (6000 sq.mt)	Rs. 4.15 Cr
Plant & Machinery	Rs. 58.37 Lacs
W.C. for 1 Month	Rs. 6.21 Cr
Total Capital Investment	Rs. 11.12 Cr
Rate of Return	86%
Break Even Point	23%
*****	*****

SS FABRICATION INCLUDES MODULAR FURNITURE, KITCHEN AND KITCHEN PLATES, GRILL GATE AND RAILING [3359]

Modular Kitchen is a term used for the modern kitchen furniture layout consisting of modules of cabinets made of diversified materials which hold accessories inside, which can facilitate the effective usage of the spaces in a kitchen. Normally the units which are kept on the floor are called "floor units" or "floor cabinets" on which a kitchen worktop made of granite, marble, tile or wood has been laid for creating spaces for varied activities in a kitchen. The units which are held on the wall for storage purposes are termed as "wall units" or "wall cabinets". In small areas of kitchen in an apartment, even a "tall storage unit" is available for effective storage. A modular kitchen is a set of pre-made cabinets that can be easily assembled together to give the user a fully functional design. It usually features a clean and contemporary finish and comes in a variety of colours and finishes. The pre-made cabinets are available in two forms - lower and upper units. It not only offers you a sense of freedom for customization, it also gives you plenty of storage in limited space. They are gaining popularity because they are much smoother to operate and look smarter than the non-modular form of kitchens. The modular form of kitchens date back to more than 125 years and are said to be used and conceptualized first in Germany. However, the designs became extremely popular in Sweden and were known as Swedish Kitchens for quite a long time. As compared to the custom-made kitchens, a modular kitchen is less expensive as everything is pre-made. Opting for it helps save time as everything is already constructed and just requires installation. On the other hand, custom-made kitchen needs to be built onsite, is time-consuming and sometimes may not give you a satisfactory result both in the looks & utility departments. • Aside of the high functionality because of well-defined storage modules it gives your cooking area a well-defined, sleek, clean and trendy look. • It not only adds to the beauty of the house, it also offers enough storage space for all big and small utensils. • One can choose from a variety of colours, patterns and finishes to make the kitchen stand out from the rest and match the look of the house. • Not only it is easy to repair, the easy to assemble and reassemble feature allows you to carry it along when you change your home. • One can effortlessly clean it without any professional help. • If any of the components of your modular kitchen go bad or get affected by the environment, they can easily be replaced/repared. While

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replacing or repairing the affected area, other parts of need not to be disturbed. • They are highly durable as the attachments are usually made using high-quality material. • A modular kitchen makes working easier and convenient, courtesy the properly planned cabinets, drawers and racks. • You can also opt for one that matches the design of the furniture kept in your house. Stainless steel kitchens have become extremely popular nowadays with the its airy and light feel. But one thing that might not appeal to experts with this material used for kitchen cabinets is its issue or staining. Also, stainless steel acts as a conductor of electricity and might require the repainting job in every few months. But the appearance and feel of this material used for kitchen cabinets in a modular kitchen design is classy and pleasing to the eyes.

COST ESTIMATION

Project Name	SS Fabrication
Land & Building (6000 sq.mt)	Rs. 7.31 Cr
Plant & Machinery	Rs. 4.92 Cr
W.C. for 2 Months	Rs. 5.26 Cr
Total Capital Investment	Rs. 16.07 Cr
Rate of Return	24%
Break Even Point	55%

KRAFT PAPER FROM WASTE PAPER (40 TPD) [3360]

Paper form a commodity of prime importance to day from the parts of view of mass communication, education, and industrial and economic growth. The art of paper making was first discovered in China in and around 2nd century. B.C. pan where it travelled slowly west ward and reached the prantiens of Europe. By the end of 14th century, a member of paper mill existed in Europe, particularly in Spain, Italy, France and Germany. the invention of printing in 1956 brought a vastly in creased demand for paper, and paper-manufacturing was introduced to England. America followed in 1690. Agricultural residues, such as bagasse, rice husk, wheat husk jute sticks, grasses, etc are fast becoming popular materials for paper making. considerable attention is being given to the utilization of various agricultural by products for preparing pulp for paper manufacture landable efforts are being make in this direction. Paper production requires a disintegration of the bulky fibrous material to individual or small agglomerate fibres. This is called pulping. The ideal fibre for high grade paper should be long, high in cellulose content and low in lignin content. Most ideal raw material for paper products is bamboo. Other sources are bagasse and hardwoods like jute stick must be developed and good quality paper pulp make by blending with bamboo fibre. Over recent years, the emergencies of mini paper plants on a reality seems to hold the promise of

adding new horizons to the development and growth of Indian paper industry. In may be noted with concern that the large sector of this industry for quite sometime, has failed to sustain any appreciable growth due to various factors eg. The plant being highly capital intensive low rates of return and the raw material bottlenecks etc. mini paper plants are viewed as an effective remedy to the current ailments of the paper industry as they involve much less capital cost and are proved to be technically feasible and economically viable these plants can be erected on the basis of fully indigenous expertise, knowhow and machinery. Moreover, they after an effective means of lasing considerably the burden an conventional raw materials. The paper industry of India is faced with numerous difficulties, some of which are given below:

1. Shortage of Fibrous Raw Material:- The lack forest resources requires long range planning for development of improved bamboo has vesting utilization of bagasse, jute etc. 2. High process and Shortage of Chemicals:- Shortage of sulphur, salt cake (Na2So4) and chlorine with corresponding high prices place in the Indian paper industry to a great disadvantage in attempting to export paper product to a regement of foreign exchange position. This forces a great deal move attention an chemical recovery methods. Due to the above problems, it become necessary to use simple and more scientific methods for the manufacture of paper products. Due to the lack of the fibres material jute stick is now being started to be wed as the starting material. the paper produced from jute is very hard and has comparatively high tensile strength. Move over, the chemicals used are available indigenously without any difficulty. There are move than 30 to 40 paper industries producing in public and small scale sector. The other factors which can be kept in view in selecting the raw materials. 1. The fibres of the raw material should be of high strength. 2. Strength methods used for preparing the pulp shaved be easy and hot be complicated. 3. Properties of the product shaved be of quality by seeing the above problems and jute sticks are quite suitable for the production of paper. A good supply of jute sticks should be ensured by the suppliers. Mini paper plants are mainly dependent on supplies of waste paper and rafs. They also make pulp out of cereal straw and other agricultural residues. A further important factor in favour of the mini paper plants is that their consumption of chemicals is far less than in the large scale units, and the power requirements are also less. The quality of paper produced in mini paper plants is, however, some what inferior to that obtainable in large scale units.

COST ESTIMATION

Plant Capacity	40 MT/Day
Land & Building (16,000 sq.mt)	Rs.12 Cr
Plant & Machinery	Rs. 15.19 Cr
W.C. for 3 Months	Rs. 9.61 Cr
Total Capital Investment	Rs. 37.74 Cr
Rate of Return	32%
Break Even Point	48%

SMALL MILK PROCESSING UNIT OF 200LPH MILK RECEPTION, PROCESSING AND (500ML) POUCHING PLANT (TOTAL PER DAY CAPACITY 2000 LITRES) [3361]

The importance of milk in human diet especially for children and expectant and nursing matters is vital. Unlike rich countries like the U.K. and the U.S. dairying in India is a subsidiary occupation of almost all the farmers. More than 60 per cent of the families involved in dairying belong to the small or marginal farmers or even agricultural labourers. In the first half of the 1900 dairying in the country was largely unorganized, except for military farm which were established and largely stocked with the European breeds. In the plantation areas, pure breed exotic bulls were randomly crossbled with local cows. Apart from the "poskts" of improved animals thus created, dairying was largely left in the hands of traditional producers, middle man, product makers and vendors. Some private dairies were more or less modern processing facilities were encouraged to make pasteurized butter mainly for the British Army. In the early 1940's one such firm also become the prime supplies to the country's first official urban milk supply scheme "The Bombay Milk Scheme". Under it chilled milk was transported in cans by rails to Bombay from Anand in Kheda District some 425 km from Bombay. When India became independent in 1947, are of earliest projects of its type to be adopted was the creater Bombay Milk Scheme which consisted of a market milk plant in Bombay, supplied with milk by the Khairs District Cooperative Milk producers union. The union which had its processing plant close to the town of Anand, ultimately came to be known as the Anand Milk Union Ltd abbreviated to Amul, meaning "beyond price" or priceless". The world's largest during development programme the operation flood is distinguished by its involvement of small holders and landless rural milk producers. It aims to create a "flood" of usually-produced Milk assuring the farmer of remunerative price and ready market and the urban consumer of wholesome milk at stable and reasonable prices. The modern dairy sector was best with problems, the more important of which

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were as follows. State Government found it difficult to effectively against milk production, procurement processing and marketing. The urban dairies were unable to obtain more than a 30 per cent share of their liquid-milk markets. "Dairy development" had after been treated as if-it were synonymous with building dairy processing plants and there plants frequently got built in the towns where the consumers were, rather than in the milk-sheds where milk was produced and so they had found it difficult to organize rural milk procurement.

COST ESTIMATION

Plant Capacity	2000 Ltr/Day
Land & Building (400 sq.ft)	Existing
Plant & Machinery	Rs. 25 Lacs
W.C. for 2 Months	Rs. 52 Lacs
Total Capital Investment	Rs. 87.87 Lacs
Rate of Return	66%
Break Even Point	47%

AGRICULTURE COLLEGE [3362]

Agriculture has been the mainstay of Indian economy since ages. The science and art of agriculture has many references in the Vedic literature and the ancient history of the mankind. The agriculture sector in India provides livelihood to about 52% of the population of the country and contributes about 15% to the Gross Domestic Product. Trained human resource has been the key factor behind the Green Revolution, White Revolution, Yellow Revolution, that has led India to become self reliant in food and becoming a fast developing economy. Knowledge based, input-use efficient, eco-friendly, and high tech precision agriculture has been the next stage for which efforts have been directed by Indian Council of Agricultural Research (ICAR) and Agricultural Universities (Aus) in planning, designing and executing the national agricultural educational programmes. Considering the importance of Agricultural establishment of independent Rural Universities in the country in the year 1948. As a result of this recommendation, first State Agricultural University (SAU) was established in 1960 at Pantnagar (Nainital) on the pattern of the Land Grant Colleges of the United States. The University Grants Commission accorded the status of Deemed-to-be-University (DU) to Indian Agricultural Research Institute, New Delhi in 1958 which became the first ICAR Institute as Deemed University conducting postgraduate teaching and research. Today, the country has a large ICAR-AU system with a total of 66 Agricultural Universities (Aus) comprising of 56 State Agricultural, Veterinary, Horticulture and Fisheries Universities, 1 Central Agricultural University, Imphal, 4 ICAR-DUs (IARI, IVRI, NDRI and CIFE), 4 Central Universities having agricultural faculty (BHU, AMU, Viswa Bharati and

Nagaland University) and 1 Sam Higginbottom Institute of Agriculture, Technology & Sciences (SHIATS), Allahabad (formerly Allahabad Agricultural Institute) awarding various kinds of degrees in different disciplines of agricultural, veterinary and allied sciences. Agricultural education is also imparted in some traditional universities of the country. Agricultural education system is producing invaluable human resource and every year about 15,000 graduates, 11,000 Masters and 2,500 Ph.D.s are admitted. The Under Graduate degree in 11 subjects of agriculture and allied sciences and Master's degree in about 93 subjects, awarded by the Universities associated with the ICAR are well recognized and accepted for higher education globally. Some of the graduates also start their own business units including the Agri. Clinics and Agro Service Centres. Following are some of the sectors providing placement to the agricultural graduates.

COST ESTIMATION

Project Name	Agricultural College
Land (80,000sq.mt)	Rs. 16.13 Cr
Plant & Machinery	Rs. 3.00 Cr
W.C. for 2 Months	Rs. 1.44 Cr
Total Capital Investment	Rs. 21.73 Cr
Rate of Return	15%
Break Even Point	69%

CABLE TRAY MANUFACTURING [3363]

A cable tray is a metallic frame array which is used to support or lay cables onto it. The cables will be tied onto the tray and will not be hidden. A cable trunk is an enclosure where cables are placed in for purposes of distribution. The cables may be tied or not tied is use for arranging power supply cable with the use of cable tie to look neat and for easy tracing if there is fault on the cable. (1) Ladder Cable Tray:- * Generally used in applications with intermediate to long support spans 12 to 30 feet. * Ladder cable tray is used for about 75 percent of the cable tray wiring system installations. It is the predominate cable tray type due to its many desirable features: * A ladder cable tray without covers permits the maximum free flow of air across the cables. This allows the heat produced in the cable's conductors to effectively dissipate. Under such conditions, the conductor insulation in the cables of a properly designed cable tray wiring system will not exceed its maximum operating temperature. The cables will not prematurely age due to excessive operating temperatures. * The rungs of the ladder cable trays provide convenient anchors for tying down the cables in the non-horizontal cable tray runs or where the positions of the cables must be maintained in the horizontal cable tray runs.

This capability is a must for single conductor cable installations. Under fault conditions (short circuit), the magnetic forces produced by the fault current will force the single conductor cables from the cable tray if they are not securely anchored to the cable tray. * Cables may exit or enter the ladder cable trays through the top or the bottom of the cable tray. Where the cables enter or exit conduit, the conduit to cable tray clamps may be installed upright or inverted to terminate conduits on the top or bottom of the cable tray side rail. * Moisture can't accumulate in ladder cable trays. * If cable trays are being installed where working space is a problem, hand access through the cable tray bottom may help to facilitate the installation of small diameter cables: control instrumentation, signal, etc. * The most common rung spacing for ladder cable tray is 9 inches. This spacing may be used to support all sizes of cables. This spacing is desirable for the small diameter Type PLTC and TC cables as the support distance is such that there is no visible drooping of the small cables between rungs. 12 or 18 inch rung spacing provides adequate cable support but the slight amount of small diameter cable drooping between rungs may be aesthetically objectionable for some installations. The maximum allowable distance between supports for 1/0 through 4/0 AWG single conductor cables is 9 inches.

COST ESTIMATION

Plant Capacity	2500 Mtr/Day
Land & Building (4000 sq.mt)	Rs. 4.22 Cr
Plant & Machinery	Rs. 98.90 Lacs
W.C. for 2 Months	Rs. 5.74 Cr
Total Capital Investment	Rs. 11.18 Cr
Rate of Return	74%
Break Even Point	30%

HDPE PIPE MANUFACTURING UNIT [3364]

High-density polyethylene (HDPE) is a polyethylene thermoplastic made from petroleum. It is known for its large strength-to-density ratio. The density of HDPE can range from 0.93 to 0.97g/cm3 or 970Kg/m3. The difference in strength exceeds the difference in density, giving HDPE a higher specific strength. It is also harder and more opaque and can withstand much higher temperatures (120°C for short periods, 110°C continuously). High-density polyethylene, unlike polypropylene, cannot withstand normally required autoclaving conditions. The lack of branching is ensured by an appropriate choice of catalyst (e.g., Ziegler-Natta catalysts) and reaction conditions. HDPE pipes are important plastic products which have wide range of applications. These have more tensile strength in comparison to other plastic

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pipes. These are being used for Sprinkler Irrigation System, potable water supply and sewerage purpose. Their low cost, easily installation and better durability make them ideal for the purpose. They also offer very good resistance to most of the chemicals and have excellent electrical insulation properties. These pipes are also used for circulation of acids in various chemical industries due to their acid resistant quality. The demand of HDPE Pipes are likely to increase due to their wide use in various sectors in India. Apart from its regular uses, such as for irrigation system, water supply, sewerage, it is being used by Department of Telecommunication for conduit for optical fiber cables. Looking to its increased demand, it appears to be good scope for setting up new small scale industries. Hence the product has good market potential.

COST ESTIMATION

Plant Capacity	8 MT/Day
Land & Building (10,000 sq.mt)	Rs. 3.24Cr
Plant & Machinery	Rs. 3.38 Cr
W.C. for 1 Month	Rs. 1.74 Cr
Total Capital Investment	Rs. 8.54 Cr
Rate of Return	27%
Break Even Point	59%

MILK CHILLING PLANT [3365]

The importance of milk in human diet especially for children and expectant and nursing matters is vital. Unlike rich countries like the U.K. and the U.S. dairying in India is a subsidiary occupation of almost all the farmers. More than 60 per cent of the families involved in dairying belong to the small or marginal farmers or even agricultural labourers. In the first half of the 1900 dairying in the country was largely unorganized, except for military farm which were established and largely stocked with the European breeds. In the plantation areas, pure breed exotic bulls were randomly crossbred with local cows. Apart from the "poskets" of improved animals thus created, dairying was largely left in the hands of traditional producers, middle man, product makers and vendors. Some private dairies were more or less modern processing facilities were encouraged to make pasteurized butter mainly for the British Army. In the early 1940's one such firm also become the prime supplies to the country's first official urban milk supply scheme "The Bombay Milk Scheme". Under it chilled milk was transported in cans by rails to Bombay from Anand in Kheda District some 425 km from Bombay. When India became independent in 1947, are of earliest projects of its type to be adopted was the creater Bombay Milk Scheme which consisted of a market milk plant in Bombay, supplied with milk by the Khairs District Cooperative Milk producers union. The

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COST ESTIMATION

Plant Capacity	2000 Ltr./Day
Land & Building (400 sq.ft)	Rs. 4.80 Lacs
Plant & Machinery	Rs. 25 Lacs
W.C. for 2 Months	Rs. 52 Lacs
Total Capital Investment	Rs. 87.87 Lacs
Rate of Return	66%
Break Even Point	47%

MICROCRYSTALLINE CELLULOSE (PHARMA, FOOD & NON PHARMA GRADE) [3366]

Microcrystalline cellulose, also known as MCC or cellulose gel, is commonly used as a binder and disintegrant in pharmaceutical tablets, as a suspending agent in liquid pharmaceutical formulations, and as a binder and stabilizer in food applications including beverages and as stabilizers, binders, disintegrants and processing aids in industrial applications, household products such as detergent and/or bleach tablets, agricultural formulations, and personal care products such as dentifrices and cosmetics. In foods, MCC is used alone or in coprocessed modifications as a fat replacer. The classic process for MCC production is acid hydrolysis of purified cellulose. In efforts to reduce the cost while maintaining or improving the quality of MCC, various alternative processes have been proposed. Among these are steam explosion, reactive extrusion, one-step hydrolysis and bleaching, and partial hydrolysis of a semi-crystalline cellulose and water reaction liquor in a reactor pressurized with oxygen and/or carbon dioxide gas and operating at

100 to 200°C. In the steam explosion process of Ha et al, a cellulose source material, such as wood chips, is contacted in a pressure reactor vessel with pressurized steam at a temperature of at least about 170°C for a brief period, concluding with a rapid release of the steam pressure (the "steam explosion" effect). Under these conditions the fibrous, amorphous, portions of the cellulose polymer chains are hydrolyzed, leaving the crystalline segments of the chains which characterize the product as MCC. The hydrolysis can be followed by determination of the extent of depolymerization of the cellulose, to a steady state known as "level off degree of polymerization" (LODP). Typically, according to Ha et al, starting cellulose will have a degree of polymerization ("DP") in excess of 1000 and the average DP characteristic of the steam exploded MCC product preferably will be in the range of about 100 to 400. The rapid decompression in the steam explosion process, particularly when effected through a small opening or die, facilitates physical separation of cellulose, hemicellulose and lignin in the source cellulose material. Such separation enables more efficient subsequent extraction of the hemicellulose and lignin. Another advantage of the steam explosion process is that it eliminates need for an acid hydrolysis to achieve the requisite depolymerization. A disadvantage is difficulty in controlling process conditions for optimization of MCC yield and quality. Ha et al disclose that the MCC product may subsequently be bleached with hydrogen peroxide or other reagent. Cellulose is the principal fiber cell-wall material of green terrestrial and marine plants, produced also by a few bacteria, animals and fungi, and thus the most abundant natural material (40% in wood, over 70% in best and leaf fibres, 95% in the ceou wall of the green alga valonia ventricosa; Ca 5 x 10¹⁰ metrictons biosynthesized yearly). Cellulose is a long linear polymer of anhydroglucose units, and this is reflected in the thread like structures of cellulose found in the plant cell walls elementary fibrils approximately 3.5 m in width and indefinite length) which are further laterally associated to provide strength (as microfibrils, generally 10-30 mm in breadth).

COST ESTIMATION

Plant Capacity	5 MT/Day
Land & Building (2000 sq.ft)	Rs. 2.97 Cr
Plant & Machinery	Rs. 4 Cr
W.C. for 2 Months	Rs. 2.03 Cr
Total Capital Investment	Rs. 9.41 Cr
Rate of Return	31%
Break Even Point	49%

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PVC COMPOUNDING PLANT FOR CABLE GRADES [3367]

Indian plastics industry is one of the largest in the Asian Region. It had a modest beginning in the late twenties when articles like combs, soap boxes, ash trays etc. began to be manufactured in the country from imported raw materials. Three are about fifty materials identified as plastics and the list is being extended continuously. Plastics are classified as thermoplastics and thermo sets on the basis of the polymerization method adopted to produce the basic plastic material as on the basis of the primary raw materials source. Polyvinyl chloride comes under thermoplastics. Polyvinyl chloride (PVC) polymers or resins are the most important constituents of PVC compounds and are classified into bulic or mass polymers, emulsion polymers, suspension polymers and paste-forming polymers. There is a fifth type known as solution polymers which is used for coating applications. Compounding of PVC resin is done in three steps, namely 1. Premixing, 2. Fusion or gelation, 3. Pelletizing or granulation. Mixing of the ingredients to a high degree of homogenization is called (premixing). The premixed material is homogenized during Fusion or Gelation. In the third step namely pelletization or granulation the homogenous mass is produced in a suitable form for smooth processing. Hence it is possible to avoid one or more of the steps with the help of modern processing equipment. Although plastic industry in India experienced many ups and downs in the 70's it has made considerable progress not only in the output and range of plastics raw materials produced and consumed but also in learning and absorbing better processing technology as well as the manufacture of more and better machine.

COST ESTIMATION

Plant Capacity	5 MT/Day
Land & Building (600 sq.mt)	Rs. 90 Lacs
Plant & Machinery	Rs. 25 Lacs
W.C. for 2 Months	Rs. 2.05 Cr
Total Capital Investment	Rs. 3.29 Cr
Rate of Return	40%
Break Even Point	45%

BANANA FIBER CLOTH MANUFACTURING & ITS BY-PRODUCTS UNIT [3368]

Banana is a globally important fruit crop with 97.5 million tones of production. In India it supports livelihood of million of people. With total annual production of 16.91 million tones from 490.70 thousand ha., with national average of 33.5 T/ha. Maharashtra ranks first in production with 60 T/ha. Banana contributes 37% to total fruit production in India. Banana is one of the major and economically important fruit crop of Maharashtra. Banana occupy 20% area among the total area under crop in

India. Maharashtra ranks second in area and first in productivity in India. Jalgaon is a major Banana growing district in Maharashtra which occupies 50,000 hectares area under Banana. But most of Banana is grown by planting suckers. The technology development in agriculture is very fast, it results in developing Tissue Culture Technique. Banana is basically a tropical crop, grows well in temperature range of 13°C – 38°C with RH regime of 75-85%. In India this crop is being cultivated in climate ranging from humid tropical to dry mild subtropics through selection of appropriate varieties like Grandnaine. Chilling injury occurs at temperatures below 12°C. The normal growth of the banana begins at 18°C, reaches optimum at 27°C, then declines and comes to a halt at 38°C. Higher temperature causes sun scorching. High velocity wind which exceeds 80 km phrs damages the crop. Soil for banana should have good drainage, adequate fertility and moisture. Deep, rich loamy soil with pH between 6-7.5 are most preferred for banana cultivation. Ill drained, poorly aerated and nutritionally deficient soils are not suitable for banana. Saline solid, calcareous soil are not suitable for Banana cultivation. Avoided soil of low laying areas, very sandy & heavy black cotton with ill drainage. A soil that is not too acidic & not too alkaline, rich in organic material with high nitrogen content, adequate phosphorus level and plenty of potash are good for banana. In India banana is grown under diverse conditions and production systems. Selection of varieties, therefore is based on a large number of varieties catering to various kinds of needs and situations. However, around 20 cultivars viz. Dwarf Cavendish, Robusta, Monthan, Poovan, Nendran, Red banana, Nyali, Safed Velchi, Basarai, Ardhapuri, Rasthali, Karpurvalli, Karthali and Grandnaine etc. Grandnaine is gaining popularity and may soon be the most preferred variety due to its tolerance to biotic stresses and good quality bunches. Bunches have well spaced hands with straight orientation of figures, bigger in size. Fruit develops attractive uniform yellow colour with better self life & quality than other cultivars. Prior to planting banana, grow the green manuring crop like daincha, cowpea etc. and burry it in the soil. The land can be ploughed 2-4 times and leveled. Use ratovator or harrow to break the clod and bring the soil to a fine tilt. During soil preparation basal dose of FYM is added and thoroughly mixed into the soil. The furrows to be open with help tractor for planting or prepared raised bed in heavy soil. Apply 20 kg of FYM (well decomposed), 250 gm of Neem cake and 20 gm of conbofuron per plant. Prepared pits are left to solar radiation helps in killing the harmful insects, is effective against

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soil borne diseases and aids aeration. In saline alkali soil where PH is above 8 Pit mixture is to be modified to incorporate organic matter. Addition of organic matter helps in reducing salinity while addition of purlite improves, porosity and aeration. Alternative to planting in pits is planting in furrows. Depending on soil strata one can choose appropriate method as well as spacing and depth at which plant is required to be planted. The banana plant is cultivated mostly in the tropical but situated within the 60oF is others north and south of the equator. In certain parts of India, in many pacific islands and in tropical of the people. Fresh fruit is eaten as dessert, while unripe fruit and fruit from cooking types are eaten as vegetable. Fruit pulp is dried and processed into flour or preserved in many forms for subsequent use. Banana is a fair source of calcium and iron and a rich source of potassium, magnesium, sodium and phosphorus. Bananas contain comparatively large amounts of two physiologically important compounds namely serotonin and norepinephrine in addition to dopamiae, 3,4, dihydroxy phenylalamine and an unidentified catecholamine. Banana peel is a potential source of pectin. Peels of green, yellow and brown bananas are reported to contain respectively 0.51, 0.38, and 0.46% soluble pectic substances and 1.28, 1.02, and 0.81% total pectic substances. The skin and pulp of green banana contain antifungal substances, while the skin and the pulp of the ripe banana contain both antifungal and antibacterial substances.

COST ESTIMATION

Plant Capacity	10,000 Mtr/Day
Land & Building (1,00,000 sq.mt)	Rs.16 Cr
Plant & Machinery	Rs. 72 Cr
W.C. for 2 Months	Rs. 11.92 Cr
Total Capital Investment	Rs. 100 Cr
Rate of Return	50%
Break Even Point	38%

ALUMINIUM NOTCH BAR/CUBES/ SHOTS MANUFACTURING UNIT FROM SCRAP CAP: 20 TPD

[3369]

Aluminum recycling is the process through which scrap aluminum is reprocessed to be used in products after its initial production. Aluminum producers and recyclers in the aluminum industry work with individuals, businesses, and communities to enable both curbside and industrial recycling programs. For most aluminum products, the metal is not consumed during the products lifetime, but it is simply used making it easy to recycle without losing its intrinsic properties. Used beverage container (UBC) recycling is the most recognized of the aluminum recycling programs. However, end of life recycling of certain products like building parts and cars allows for the production of recycled

materials like Aluminium notch bar, shots and cubes. Advantages of Aluminum Recycling. Aluminum recycling is a common practice that has been around since the early 1900s. It is a very important process because of the numerous advantages as can be seen below: 1. Saves Energy: Used beverage containers are among the largest components of aluminum scrap. Most of the scrap metal is recycled back into cans. The other largest user of the recycled aluminum is the automotive industry. According to the Aluminum Association President, Mr. Steve Larkin, recycling of old aluminum cans into new ones requires less energy (95%) than producing new ones from the scratch. He states that the recycling process also produces 95% reduced greenhouse gas emissions than entirely making new cans. 2. Prevents Depletion of a Valuable Commodity: Aluminum is a metal that is mined from the earth's crust as Bauxite ore. This therefore means that, recycling prevents continuous mining and depletion of this valuable commodity. Each year, recycling prevents approximately five percent of the total Bauxite ore mining in the world. 3. Reduction of the Carbon Footprint:

Increased environmental awareness and the need for social responsibility have led to the increased aluminum recycling among many countries and companies today. Did you know that recycling aluminum helps in preventing more than approximately 90,000,000 tons of toxic carbon dioxide from being let free into the air every year? Yes, recycling a single drink can made of aluminum prevents carbon dioxide emission that equals a single mile car ride and it saves adequate energy to power a typical television set for about two to three hours. Today, every country has the responsibility to do whatever it can to reduce carbon emission. This means that if all countries focus on the reduction of carbon dioxide emissions there will be little concern about global warming. 4. Helps in Satisfying the Increasing Demand: As the population increases so does the need for aluminum products. Today, aluminum has more uses and applications other metals. This means that there should be a continuous production of this metal so as to meet the increasing demand. Mining alone is not sufficient enough to meet this demand. Recycling therefore comes in to bridge the gap. In fact half of the aluminum cans are recycled.

COST ESTIMATION

Plant Capacity	20 MT/Day
Land & Building (8000 sq.mt)	Rs. 7.68 Cr
Plant & Machinery	Rs. 1.40 Cr
W.C. for 2 Months	Rs. 11.54 Cr
Total Capital Investment	Rs. 20.90 Cr
Rate of Return	28%
Break Even Point	49%

AEROSOL - DEODORANT [3370]

Deodorant perfume spray is a innovated concept and is used to remove bad odour from the body and is mild in perfumery notes and sometimes it called aerosol deodorant body spray. The product is easily spreadable over the surrounding and volatile in nature. Deodorant perfume spray is now very familiar and appreciable by people at large due to easy accessibility and bactericide in nature. Now at present there are less manufacturers in organized sector in India and the demand is increasing day by day there is also export demand prevails in India. There is a good scope of the product and a new entrant can well venture in this field.

COST ESTIMATION

Plant Capacity	2400 BTL/Day
Land & Building (500 sq.mt)	Rs. 41.25Lac
Plant & Machinery	Rs. 24.00 Lacs
W.C. for 2 Months	Rs. 24.52 Lacs
Total Capital Investment	Rs. 93.77 Lacs
Rate of Return	108%
Break Even Point	32%

STEEL GRATING (GALVANISING ELECTRO FORGED STEEL GRATING) [3371]

Grating is open grid assembly of metal bars, in which the bearing bars, running in one direction, are spaced by rigid attachment to cross bars running perpendicular to them or by bent connecting bars extending between them. Grating is a structural element that has a high load-bearing capacity with a low dead weight and a high level of transparency. The positive-fitting connection of the bearing bars and cross bars with the surround make the grating not only a very stable, but also visually attractive product. The applications are very diverse, as grating is used everywhere in industry and architecture. As an extremely robust, safe yet light platform flooring, the grating is indispensable in all areas of heavy industry. Grating is installed in refineries, power stations, steel mills, mines and on oil platforms. Grating is being used increasingly more in the logistics industry as platform flooring and shelves. Architects and building owners appreciate the grating as a product which is both aesthetically pleasing and functional, be it used as a decorative facade cladding, a suspended ceiling or sun shield. Steel grating is a kind of open steel member with its bearing bars & cross bars jointing at their intersections either by welding or by locking. Electroforged Steel Gratings are made using the electroforging process. In this process, the square twisted rods (Cross Members) are fused into the main load bearing members at using a special welding machine at very high current and tonnage. The Cross Members are properly set-in the Load Members such that it

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projects out of the grating top member by only a little more than 1 mm. This improves the slip resistance during walking. Electroformed Grating Panels are generally manufactured to 6000 mm lengths.

COST ESTIMATION

Plant Capacity	9 MT/Day
Plant & Machinery	Rs. 1.37 Cr
W.C. for 2 Months	Rs. 1.29 Cr
Total Capital Investment	Rs. 2.94 Cr
Rate of Return	71%
Break Even Point	50%

ACETIC ANHYDRIDE [3372]

Acetic Anhydride is a clear, colorless liquid with a very pungent, penetrating, vinegar-like odor. It is completely miscible with diethyl ether and can be easily dissolved in the usual organic solvents; it reacts with alcohols. Acetic Anhydride is an excellent solvent for numerous organic and inorganic products. Acetic Anhydride is made from Acetic Acid. In the presence of water, Acetic Anhydride reacts slowly at room temperature to form acetic acid. At moderate and elevated temperatures, however, this reaction can be extremely exothermic and violent. It is accelerated by catalytic quantities of sulfuric acid or other mineral acids and may even be explosive.

COST ESTIMATION

Plant Capacity	1000 Ltr/Day
Land & Building (1500 sq.mt)	Rs.1.93 Cr
Plant & Machinery	Rs. 80 Lacs
W.C. for 2 Months	Rs. 44.83 Lacs
Total Capital Investment	Rs. 3.39 Cr
Rate of Return	18%
Break Even Point	66%

BENEFICIATION PLANT FOR GLAUCONITE [3374]

'Beneficiation' is the processing of raw minerals to yield marketable products by means of physical and mechanical methods without destroying their physical and chemical identity. Glauconite is a greenish mineral of the mica group, a hydrous silicate of potassium, iron, aluminum, and magnesium, (K,Na)(Al,Fe,Mg)2(Al,Si)4O10(OH)2, found in sedimentary rocks as an accessory mineral. When in quantities over about 50%, the rock is no longer a glauconitic sandstone or mudstone, it is called a greensand. These rocks have been used historically as fertilizers, water softeners, and artist's pigments. Greensand, greensand marl, and green earth are names given to sediments rich (>50%) in the bluish green to greenish black mineral known as glauconite. The word glauconite is derived from the Greek word glaukos, meaning bluish green. The term "greensand" as a rock name for a glauconite-bearing sediment is more appropriate than "greensand marl," a term that has been doggedly perpetuated in the literature. Because of its potash and

phosphate content, greensand was mined and marketed as a natural fertilizer and soil conditioner for more than 100 years. The advent of manufactured fertilizers with adjustable nutrient ratios led to a decline in the use of greensand in agriculture. The material has since been recognized as useful in water treatment. Unfortunately, despite large reserves and world-wide distribution, glauconite has not been utilized to any significant commercial extent because no major application has been found for a substance with its chemical composition and properties. This is probably due mostly to a paucity of research on its potential commercial uses. Extraction of potash received considerable attention during and just after World War I. Because of relatively high extraction costs and generally low potash content (viz., less than 8%), glauconite lost its appeal as a source of this commodity.

COST ESTIMATION

Plant Capacity	100 MT/Day
Land & Building (10,000 sq.ft)	Rs. 2.82 Cr
Plant & Machinery	Rs. 3.30 Cr
W.C. for 2 Months	Rs. 51.37 Cr
Total Capital Investment	Rs. 57.82 Cr
Rate of Return	22%
Break Even Point	46%

PAPAYA GROWING AND PAPAIN PRODUCTION [3375]

Papaya (*Carica papaya*) is a tropical fruit having commercial importance because of its high nutritive and medicinal value. Papaya cultivation had its origin in South Mexico and Costa Rica. Papaya is a popular fruit famous for its high nutritive and medicinal values. It comes early in bearing than any other fruit crop, produces fruits in less than a year and the production of fruits is quite high per unit area. Papaya is cultivated more or less on a commercial scale in the foothills and plain valleys. Papaya is a native crop of Mexico, and was introduced in India in the 16th century. Now it has become popular all over India and is the fifth most commercially important fruit of the country.

COST ESTIMATION

Plant Capacity	300 KGS/Day
Land & Building (48 Acres)	Rs. 4.01 Cr
Plant & Machinery	Rs. 76 Lacs
W.C. for 3 Months	Rs. 75.28 Lacs
Total Capital Investment	Rs. 5.68 Cr
Rate of Return	23%
Break Even Point	51%

ZINC CHLORIDE (ZnCl₂) [3376]

Zinc is in Group II B of the periodic table and exhibits a valence of +2 in all its compounds. Being high on the electromotive series, Zinc forms quite stable compounds. Bonding in Zinc compounds tends to be covalent, with strongly electropositive elements, eg chlorine, the bond is more ionic. Zinc chloride is one of the important zinc

compounds. It is stable in the vapour phase upto 900°C. It is very hygroscopic, extremely water soluble, and soluble in organic liquids such as alcohols, esters, ketones, ethers, amides and nitriles. Hydrates with 1, 1.5, 2.5, 3, and 4 molecules of water have been identified and great care must be expressed to avoid hydration of the anhydrous form. Aqueous solution of zinc chloride are acidic (pH=1.0 for 6 m), and when partially neutralized form slightly soluble basic chlorides eg. ZnCl₂ and 4 Zn(ch)₂ and Zn(ch)Cl many other basic chlorides have been reported. Zinc Chloride (Zn Cl₂) is available as white, crystalline powder, odourless, moulded in pencils or porcelains like mass. It is one of the most soluble inorganic substances 432gm dissolving in 100 ml of water at 25°C, and 635 gm at 100°C. It is also quite soluble in organic solvents containing oxygen or nitrogen. It is difficult to remove the last traces of water from the solid for it is highly hygroscopic. It is surprising that the degree of hydrolysis of aqueous solution of Zinc Chloride at moderate dilution is very small. Its aqueous solution is acidic. It has been called "butter of zinc" because of its formation of a white semi solid mass on evaporation. Zinc Chloride is obtained by heating zinc with dry chlorine gas, by the action of hydrochloric acid on Zinc Oxide, or by heating a mixture of Zinc Sulphate and Sodium Chloride. It is economical to manufacture zinc chloride from secondary Zinc sources as Zinc dross, sal skimming, etc. The zinc dross is treated with some what less than required quantity of hydrochloric acid and the clear liquid is filtered off. The oxides dross residue is then treated with chlorine and the resultant zinc chloride is leached off and added to the first filtrate. The clear liquid is evaporated to the desired stage. Zinc chloride is an industrially important compound of Zinc. In aqueous solution, it may be used alone or in combination with phenol or sodium chromate as a wood preservative for railway sleepers poles for communication lines, etc. and for fire proofing timber. In the textile industry, Zinc chloride is used for crimping wool, cotton and silk. It is used as carbonizing agent in treating wool and for fire proofing woolen goods. In the rayon industry, Zinc Chloride is used as catalyst or process material for miscellaneous purposes.

COST ESTIMATION

Plant Capacity	13.33 MT/Day
Land & Building (3000 sq.mt.)	Rs. 2.25 Cr
Plant & Machinery	Rs. 1.25 Cr
W.C. for 2 Months	Rs. 3.14 Cr
Total Capital Investment	Rs. 6.84 Cr
Rate of Return	26%
Break Even Point	54%

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Melamine formaldehyde powder	carboxylic acid (natca)	acetic acid and hydrogen (35%) using sulphuric acid as a catalyst	Polyurethane foam
Menthol based project	Naphthalene balls	Perfume (lemon & others)	Polyvinyl acetate
Menthol bold crystals from flakes	Naphthalene balls & phenyl (integrated unit)	Perfume spray deodorant	Polyvinyl acetate based adhesive
Menthol bold crystals from menthol flakes	Natural mineral water by reverse osmosis process	Pest control liquid used for white ants termite	Potassium carbonate (solid) from potassium chloride solution
Menthol crystal & mentha oil	Neoprene based adhesive	Pesticide and insecticide	Potassium chloride from muriate of potash (mop)
Menthol crystal & menthol oil	Nickel plating brightner (primary or carrier brightner & secondary brightner)	Pesticide preparation using neem fruit & seeds (margosa)	Potassium dichromate/ bichromate
Menthol crystals and menthol oil	Nickel sulphate	Pet bottles from preform	Potassium hydroxide caustic potash from potassium chloride solution 18%
Mercuric oxide	Nicotine from tobacco waste	Pet preform from resin for pet bottles	Potassium iodate
Metal polish soap	Nicotine sulphate from tobacco waste	Petroleum jelly	Potassium iodate (by electrolysis process)
Metal pre treatment chemicals	Nitro benzene	Phenol	Potassium iodide (i.p.)
Metallic stearate by precipitation & fusion process	Nitro cellulose sanding sealer/ laquer	Phenyl (black) in liquid form	Potassium nitrate
Metallic stearate by precipitation and fusion process	Nitro musk	Phenyl acetic acid	Potassium nitrate
Methane gas by sodium acetate & soda lime	Nitrogen & oxygen gas plant	Phosphate and mixed fertilizer (npk)	Potassium per oxy di sulphide
Methanol (hplc grade)	Nitrous oxide	Phosphating solution	Potassium permagnate
Methyl acetyl ricinolate	No-carb paste	Phosphoric acid	Potassium permanganete
Methyl chloride	Non-ionic surfactant (wetting agent)	(purification) from crude	Potassium persulphate
Methyl cinnamate	Npk fertilizer	Phosphoric acid (purification) from spent acid	Potassium silicate
Methyl stearate	Npk mixed fertilizer (molasses based)	Phosphoric acid (purification) from spent acid	Potassium silicate by ion exchange process
Methyl vinyl ether	Octanol (octyl alcohol) from molasses	Phosphoric acid from rock phosphate	Potassium stearate
Methylene blue	Oleoresin from chilly and ginger (extraction)	Phosphoric acid manufacturing and purification (manual process)	Potassium sulphate
Metol	Omega three	Phosphorus by chemical process	Potassium sulphate (cap:200 tpd)
Metol from hydroquinone & methylamine	Ortho nitro phenol	Photo emulsion for rotary screen printing	Potassium sulphate (fertilizer grade)
Metronidazole	Ossein from animal bone	Phthalic anhydride	Potassium sulphate Cap: 200 tpd
Micanite	Oxalic acid from molasses	Phthalic anhydride	Power alcohol
Micro nutrient mixture	Oxalic acid from rice husk	Phthalocyanine blue	Power alcohol & imfl from molasses
Mineral water	Oxalic acid from sugarcane	Phthalocyanine pigments	Precipitated silica
Mineral water and pet bottling plant	Oxalic acid from tree bark	Phyto chemicals	Printing inks (various types)
Mineral water in bottles, glass and pouches	Oxalic acid from waste vegetables	Pigment emulsion for textile	Processing of datura stramonium into hyosyamina & atromin
Mini cement plant (by rotary kiln process)	Oxygen and nitrogen (liquid) plant	Pigment gum	Production of ena,rectified spirit and ethanol (cap: 60,000 ltr/day)
Mixed fertilizer	Oxygen and nitrogen gas plant	Plant growth reagen based chlorothyltrimethyl ammonium chloride	Production of lime and precipated calcium carbonate
Mono calcium phosphate (animal feed grade and ip grade)	Oxygen and nitrogen plant	Plant growth reagen based chlorothyltrimethyl ammonium chloride	Production of lime putty (on hydrated lime base and on white cement base)
Mono chloro benzene	Oxygen carbon dioxide and argon gas	Plant harmones based on 2,4-dichlorophenoxy	Propylene glycol
Mono ethylene glycol from molasses	Oxygen gas	Plaster of paris bandages	Psa based nitrogen.generator
Monocalcium phosphatge (mcp) and dicalcium phosphate (dcp)	Oxygen gas plant	Plastic waste reprocessing	Pvc resin from ethyl alcohol
Monochloro acetic acid	Oxygen gas plant (air separation method)	Plasticine (modelling clay)	Pyridine & its derivatives
Monochloro acetic acid from ethanol and chlorine	Oxygen gas producing plant	Poly propylene oxide	Quartz based industries (quartz powder, silica sand, silica ramming mass & fused silica)
Monochlorobenzene	Oxygen lancing pipe	Poly vinyl acetate	Rapid fast dyes (only process)
Monocrotophos (technical)	Oxygen/carbon dioxide gas cylinder	Poly vinyl acetate emulsion	Reactive dyes & printing paste
Monosodium glutamate	Packaged drinking water (packed in 330 ml cup, 500 ml pet bottle, 1500 ml pet bottle and 20 ltr. jar)	Polyaluminium chloride (liquid and Powder)	Reactor (chemical)
Mosquito & flies repellent agarbatti (incense sticks)	Para amino benzoic acid	Polyester resin (g.p.grade, laminate grade, electrical grade)	Reclamation of nickel spent catalyst from vanaspati industry
Mosquito coil	Para amino phenol	Polyol from propylene oxide	Reclamation of spent bleaching earth
Mosquito coil & mat	Para chloro nitro benzene	Polyol used for polyurethane	Reclamation of used engine oil (by clay & vacuum distillation process)
Mosquito mat	Para toluene sulphonic acid	Polystyrene	Recovery of lead from disposed lead acid battery
Mosquito repellent vaporiser (liquid mosquito destroyer)	Para-octyl phenol	Polyurethane releasing agent	Rectified spirit from mahua
Mother tincture & bio chemic medicines	Pectin from apple pomace		
N-acetyl thiozolidine-4 carboxylic acid (natca)	Pectin from citrus/lemon		
N-acetyl thiozolidine-4-	Pectin from mango peel		
	Pectin from orange peels		
	Pectin from raw papaya		
	Peracetic acid from glacial		

flowers Rectified spirit from molasses & mahua flowers Rectified spirit from rice straw Red oxide paint/primer (anti corrosive) based organic red pigments Removal of antimony from lead scrap Repacking of chemicals Repacking of laboratory chemicals Resorcinol Rhodium plating on gold jewellery Rock phosphate upgradation and process plant Rosin sizing agent Safety seal for lpg cylinders Sagol Salicylic acid Saline and injection water Santonin Sennosides from senno leaf Shoe polish Silica gel (blue self indicating process) Silica ramming mass Silicon from rice husk Silicon from silica (semi conductor grade) Silicone compound Silicone emulsion Silicone resins Silicone spray silver brazing foil Silver extraction from waste hypo solution (x ray film and cinema film) Silver extraction from x-ray film Silver nitrate Silver parts for ceramic capacitor single super Silver refining by electrolysis Single super phosphate Single super phosphate & mixed fertilizer (npk) Single super phosphate & sulphuric acid Single super phosphate (s.s.p) & sulphuric acid Soda ash Soda ash (sodium carbonate) Soda ash from natron Soda ash plant (from solution brine) Soda water bottling plant (carbonated beverage) Sodium alginate Sodium alginate Sodium aluminate Sodium aluminium sulphate Sodium benzoate Sodium bicarbonate (baking soda) from soda ash Sodium bisulfite Sodium carbonate & silica	Sodium chloride Sodium chromate Sodium cyclamate Sodium dichromate Sodium dichromate & sodium sulphate as by products Sodium fluoride Sodium formaldehyde sulfoxylte Sodium formate Sodium hexa meta phosphate Sodium hydro sulfite Sodium hydrogen sulphide 30% solution Sodium hydrosulfite Sodium hydrosulfite (by sodium formate process) Sodium hypo chloride (bleach liquor) Sodium iso propyl xanthate Sodium lauryl ether sulphate Sodium lauryl sulphate Sodium lauryl sulphate & sodium lauryl ether sulphate Sodium meta silicate Sodium nitrate Sodium petroleum sulphonate Sodium petroleum sulphonate (emulsifier) Sodium sesqui carbonate from soda ash Sodium silicate Sodium silicate by hydro thermic process using quartz and caustic lye Sodium silicate from (1) paddy silk husk, (2) silica Sodium silicate from quartz and caustic lye Sodium silicate from quartz and caustic lye Sodium silicate from silica & soda ash Sodium silicate from silica and soda ash Sodium silicate from silica sand & soda ash Sodium stannate Sodium sulphate Sodium sulphide by barium sulphate process Sodium sulphide from ammonia & sodium chloride Sodium sulphide from sodium sulphate Sodium sulphide from sodium sulphate Sodium sulphide from sulphur and caustic soda Sodium sulphite Sodium tripoly phosphate Softener (cationic, anionic & non ionic) Solvent extraction method for curcumin Spirit from pine apple Stannous chloride Stannous oxalate	Starch & allied products from maize Stearates manufacture Stearates manufacture (calcium, Aluminium, Magnesium, Zinc) Stearic acid Submerged arc welding flux (fused and agglomerated type) SUCCINIC ACID PRODUCTION Sugarcane wax from press mud Sulfamic acid pure crystal and other grade (gp,sr & tm grade) Sulfanilic acid in powder form Sulphamic acid (descalant & technical grade, s.r.grade) Sulphur dusting powder Sulphur 80% wdg Sulphur 80wdg powder and sulphur 90 wdg powder (both) Sulphur black dye Sulphur blue dye (colour index 7) Sulphur crystals/lumps Sulphur dioxide (liquefied) from sulphur lumps Sulphur from pyrites & slag Sulphur powder from sulphur crystal/lumps Sulphuric acid Sulphuric acid from dcda process Super phosphate (s.s.p) Superabsorbent polymer (poly acrylic acid based) Surface floor and car polish Synthetic iron oxide (yellow) Synthetic red & yellow iron oxide from iron filling & pickle liquor Synthetic red iron oxide Synthetic zeolite Tamarind kernel powder Tannic acid Tannic acid Tartaric acid Tartaric acid from tamarind leaves Textile marker pen/tube Tgpc (tetra gold potassium cyanide, 57%) Titanium dioxide Toilet cleaner Toluene and sbp from crude naphtha Tooth paste Transformer oil Tri calcium phosphate Tri ethylene glycol (teg) Tri sodium phosphate Trichloro ethylene Trimethyl ammonium chloride Triphenyl phosphite (t.p.p) Ultramarine blue	Undecenoic acid Undecyenoic acid Unsaturated polyester for rexine Urea fertilizer plant Urea formaldehydes & melamine formaldehyde powder Vat dyes Vinyl acetate monomer Vitamin c Vitamin e Washing soap and powder Waste water treatment plant for industrial sector in india (only market survey) Water chilling plant Water chilling plant Water proofing chemical Water treatment chemicals Water treatment plant Wax emulsion Wax emulsion for construction Wax emulsion for paper industry Wax floor polish Weedicide Wettable sulphur White oil Wire drawing lubricant Wire enamels Xanthates Yellow dextrin Zeolite Zeolite-a (for detergent) Zinc oxide by french process Zinc and copper sulphate from brass ash Zinc borate Zinc chloride Zinc oxide Zinc oxide Zinc oxide by french process Zinc phosphate Zinc phosphating by cold process Zinc silicate Zinc stearate Zinc stearate production line (direct method) cap: 500 ton/year Zinc sulphate Zinc sulphate (micronutrients from crops) Zinc sulphate for agricultural grage Zinc sulphate heptahydrated Zinc sulphate micronutrient for fertilizers Zinc sulphate monohydrate Zinc sulphate monohydrate Zinc sulphate monohydrate (2% crystal & 33% powder)
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<p>Aluminium Industry and Aluminium Extrusion, Wire Drawing, Aluminum Ingot, Aluminum Products, Cans, Sheet, Extruded Products, Profiles, Doors, Powder, Foil, Cone, Slug, Tubes, Bars, Conductor, Alloys, Coils, Extruded Rods, Sheets</p> <p>Aac & acsr aluminium conductors Aluminium alloy plant Aluminium foil Aluminium & aluminium alloys from aluminium scrap to make utensils (induction furnace melted) Aluminium & pvc curtain walls/windows/doors/partitions/ external cladding (acp) & s.s.hand rails Aluminium alloy Aluminium alloy conductor Aluminium alloy ingots Aluminium alloy wheel rims Aluminium alloy wheels Aluminium and aluminium alloy from scrap Aluminium beverage cans Aluminium bottle manufacturing (cold extrusion of aluminium) Aluminium brass, copper scraps sheets trading Aluminium cable Aluminium cans for beer packaging Aluminium cans for capacitors Aluminium caps for injection vials Aluminium chloride Aluminium chloride from aluminium ore Aluminium coil coating for acp and roofing industry Aluminium coil coating for acp and roofing industry Aluminium cold rolling mill for sheets & circles Aluminium composite panels (acp) Aluminium composite panels (acp) without coil coating Aluminium conductors Aluminium door, windows & fittings Aluminium door, windows, railings and fitting (with anodizing and powder coating) Aluminium doors & windows (aluminium fabrication)</p>	<p>Aluminium doors and windows Aluminium doors, windows, railing and fittings (with anodizing & powder coating) Aluminium electrolytic capacitors Aluminium end caps for electric fluorescent bulbs/ tubes Aluminium extrusion Aluminium extrusion from scrap Aluminium extrusion plant capacity:10 ton/day Aluminium fabrication (door, windows, slider etc.) glass plant and anodizing Aluminium fabrication (door, windows, slider etc.), glass plant and anodizing Aluminium fluoride Aluminium foil Aluminium foil (ultra thin soft grade) Aluminium foil container (afc) of different sizes Aluminium foil cutting & roll making Aluminium foils Aluminium furniture & hardware Aluminium gravity casting Aluminium hot & cold rolling mill Aluminium hydroxide gel Aluminium ingot by bauxite Aluminium ingots from aluminium scrap Aluminium ingots from bauxite Aluminium ingots from bauxite ore using aluminium melting furnace & rolling mill Aluminium ingots of various grades from aluminium scraps Aluminium label printing Aluminium notch bar/cubes/ shots manufacturing unit from scrap cap:20 tpd Aluminium oxide (activated alumina balls) Aluminium power cable Aluminium printing plate for offset machine Aluminium rolling mill for manufacturing aluminium circles required for pressure cookers, non stick cookware & circles Aluminium sheet rolling mill Aluminium shots and knoched bars</p>	<p>Aluminium silicate (precipitated) chemical process (not natural) Aluminium sulphate (non ferric) Aluminium sulphate (non ferrous) (17%-18% alumina content) in granules (2 mm to 4 mm) and flakes Aluminium trihydrate from bauxite in atmospheric digesters, at-110 deg celcius cap-50 tpd Aluminium utensils Aluminium utensils & school boxes Aluminium utensils and circles Aluminium window and door fabrication unit capacity 35,000 sq.mtr window per year Aluminium wire drawing Aluminium wire drawing and super enameling for winding Aluminium wire drawing and super enamelling Aluminium/copper cable lugs Bus body fabrication Door hinges (mild steel and stainless steel) Door hinges (miled steel & stainless steel) Door lock/pad lock Ferro silicon by smelting process G.i.wire and binding wire Mig wire Sheet manufacturing Sheet metal components Sheet metal parts/components Sheet metal products (ferrous/ non ferrous) Upvc windows from upvc profiles Wire drawing and galvanizing (by cold proess) with nuts & bolts Wire drawing and galvanizing by cold process Wire drawing lubricant Wire drawing powder Wire enamels Wire mesh (netting) & wire drawing Wire mesh and gauge Wire mesh from steel wire rolls Wire nails Wire nails & wire drawing Wire rope slings</p> <p>Beer and Wine Industry Alcoholic drinks from ethyl alcohol by mixing of various flavours (flavoured alcohole</p>	<p>beverages) Beer & wine Beer from potato Beer from potatoes Beer industry Beer industry (with government facility) Beer plant Beer Plant (Export Oriented Unit) Bottling of whisky Bottling plant (whisky, brandy, rum, vodka, gin) from rectified spirit/ena Fatliquor for leather applications using (chlorinated paraffin wax) Gluten free beer Imfl & country liquor Imfl (whisky) & country liquor Imfl (whisky) from potatoes Imfl wine, brandy, whisky, champagne Indian made foreign liquor (imfl) Kinnow Winery Liquor bottling plant Paper labels for beer bottles coated by high speed fully automatic machine Sodawater bottling plant (carbonated beverage) Whisky (hard drink) Whisky (imfl) Wine from banana Wine from dates Wine from mahua flowers Wine, brandy, whisky & champagne</p> <p>Bakery and Baking Products, Biscuits, Cakes, Pies, Pastries, Cookies, Breads, Baking Powder, Rusk, Buns, Toasts, Cheese Cake, Lecithin, Eggless Cake and Desserts Automatic biscuit making plant export oriented unit Automatic bread and biscuit unt (modern bakery plant) Baker's yeast Bakers yeast Bakery and biscuits equipments fabrication Bakery gel (translucent semi solid paste) Bakery industry Bakery unit (pastries, bread, buns and cake, etc) Bakery unit (pastries, bread, buns, cake, toffee etc.) Bakery unit (rusk,</p>
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<p>pastries,bread, buns cake, toffee, etc. Bakery unit (rusk,pastries, bread, buns cake,bread,buns cake, toffee etc.)1.2 tons/ day Bakery, namkeen and confectioneries Baking powder Baking soda Biscuit industry Biscuit manufacturing cap:20 ton/day Bread Bread & biscuit plant Bread & biscuits Bread and biscuit plant (bakery industry) Bread boards Bread plant Bread rusks Cookies making (bakery industry) Egg powder</p>	<p>cashew fruit apple Coffee roasting of green coffee beans Cold drink Cold drinks (soft drinks) Food grade lubricant or grease Grape juice Grape wine Instant coffee Instant tea Instant tea & coffee (premixed with sugar and milk) with organic coffee premix and sugar free coffee premix composition Mango juice Mango juice bottling plant Mango processing & canning (mango pulp) Mango processing (mango pulp, juice & slicies) Manufacture of juice concentrate of dried mahua flower Orange juice Pectin from citrus,lemon and orange Phyto tea Pineapple juice canning Pineapple juice preparation & packaging Pineapple pulp and juice Pineapple, tomato fruit juice and other products Rts juice plant Soft drink concentrate Soft drinks (non carbonated) Soft drinks (non carbonated) mango, litchi, pineapple flavours frooti type in tetrapack Soft drinks essences Soft drinks in tetra pack & pouches Soft Drinks Manufacturing Sugarcane juice in tetrapack Tea & coffee processing and packaging Tea & coffee processing and packaging Tea boutique Tea industry Tea packaging Tea packaging & distribution (marketting) Tea packaging industry Tea plantation and processing</p>	<p>Tea processing and packaging Cables viz Cable Industry, Cable Manufacturing, Aluminium Cable, Copper Cable, PVC Cables, Armoured Cable, Electrical Cable, Cable Tray, Power Cable, Metal Cable Tray, Teflon Cables, Optical Fibre Cable etc</p>	<p>made by cold process saponification) Recycle waste black oil using acid and clay Spices grinding Spray drying of menthol and peppermint oil Tomato paste,ketchup, tomato puree and tomato powder Tomato processing unit</p>
<p>Beverages, Non Carbonated Drinks, Tea, Coffee, Non Alcoholic, Cold Drink, Soft Drinks, Juices like apple, litchi, orange, pineapple, banana, mango, cashew, guava, kinnow, grape and allied</p>	<p>Aeropress coffee maker Alcohol and vodka from potato Alcohol drinks from ethyl alcohol by mixing of various flavours Alcohol from broken rice Alcohol from molasses Alcohol from potato Alcohol, beer, starch, liquid glucose, dextrose, sorbitol, vitamin-c Alcoholic beverages & venegar from coconut water Alcoholic drinks from ethyl alcohol by mixing of various flavours (flavoured alcohole beverages) Banana, apple & other fruit chips Bottling plant country liquor from rectified spirit Calcium carbonate filler masterbatch Cashew fruit juice from</p>	<p>Abc cable factory Abc cable factory (acsr aluminium conductor and cable factory) Cable tray manufacturing Cable tray manufacturing Copper and aluminium wire and cable manufacturing unit Copper sulphate from copper ash/scrap Copper wire and pvc cable Copper wire manufacturing for house and industrial applications (pvc wire and cables) G.i.wire and barbed wire Hospital disposable products like surgical gown, drape, apron, shoe cover etc. Manufacturing double glazed upvc windows with argon fill Master batches (coloured, pvc,ldpe,hdpe) Pvc compounding plant for cable grades Pvc solvent cements (upvc & cpvc) Wpc pvc foam board line cap:350 kg/hr</p>	<p>Coconut & Coconut Products, Coconut Shell Products, Coconut Plantation, Coconut Water, Coconut Sweets, Coconut Oil, Coconut Cream, Coconut Milk, Mattresses, Desiccated Coconut (DC), Coconut Milk Powder, Shell Charcoal, Shell Powder etc.</p>
<p></p>	<p></p>	<p>Chillies viz. Red Chilli Powder, Modern Chilly Powder, Chilly Oil, Chilli Sauce, Tomato Chillies, Green Chilli, Drying of Red Chillies, Spice (Chilli) Oleoresin</p>	<p>Activated carbon from coconut sheel/wood/coal & lignite Coconut & its products Coconut fibre Coconut milk powder (dehydrated) Coconut oil from copra Coconut plantation Coconut processing complex (coco oil, coco flour, coco cream, coco water, decinated coconut etc.) Coconut products & by products process complex Coconut shell powder Coconut squash & jam Coconut sweet (watery) Coconut water (coco jal) packed Fruit juice (mango, guava, banana, grape, orange, apple) & pulp, jams, jellies, squashes, chutney, sauces, ketchup, coconut water etc. Processing & utilisation of coconut Project Reports To Start New Industry on Coconut Rasgulla Manufacturing And Canning Teak plantation Tender coconut water Tender coconut water and sugar cane juice preservation in pet bottles Virgin coconut oil</p>

TERMS AND CONDITIONS

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* Start Your Own Small Business and Industry	350/- 35	* Paint Varnish Solvents & Coating Technology	800/- 80	* Technology of Synthetic Resins & Emulsion Polymers	975/-100
* Candle Making Processes & Formulations Hand-Book	750/- 75	* Paint, Pigment, Solvent, Coating, Emulsion, Paint Additives & Formulations	950/- 95	* Technology of Plastic Additives with Processes & Packaging	900/- 90
* Stationery, Paper Converting & Packaging Industries	400/- 40	* Technology of Coatings, Resins, Pigments & Inks Industries	975/-100	* Complete Technology Book On Identification Of Plastics And Plastic Products Materials	975/-100
* Modern Inks Formulaes & Manufacturing Industries	325/- 35	* Mfg. Tech. & Formulations H.B. on Thinners, Putty, Wall & Indu. Finishes & Synthetic Resins	900/- 90	* Identification Of Plastics & Other Plastic Process Industries	950/- 95
* Profitable Businesses to Start for Entrepreneurs	400/- 40	* Technology of Synthetic Resins & Emulsion Polymers	975/-100	* Complete Technology Book Of Plastic Processing And Recycling Of Plastics With Project Profiles	1250/-125
* Modern Small & Cottage Scale Industries	650/- 65	* Technology of Paints and Coating with Formulations	1750/-175	* Complete Hand Book Of Blow Moulding Plastics Technology With Project Profiles	975/- 98/-
* Profitable Small Cottage Tiny & Home Industries (2nd Edn.)	900/-90	* Powder Coating Technology	750/- 75	* Modern Technology Of Injection Moulding, Blow Moulding, Plastic Extrusion, Pet & Other	975/-100
BIO FUEL, BIO GAS & BIOPROCESSING		PLASTIC/POLYMER PROCESSING, COMPOUNDING, INJECTION MOULDING, ROTATIONAL MOULDING, PLASTIC FILM, FIBRE GLASS, PLASTIC WASTE RECYCLING, MOULDS, PET & RESINS, ADDITIVES INDUSTRIES		BEE-KEEPING & HONEY PROCESSING	
* Technology of Bio-Fuel (Ethanol & Biodiesel)	975/-100	* Paint Technology Hand Book with Formulations (Acrylic Emulsion, Powder Coating, Leveling Agents, PU Ink Binders, Dispersing Agents, Formaldehyde, Polyester Resin, Acrylic Binders and PU Coatings)	1100/- 110	* Tech Book On Beekeeping And Honey Products With Project Profiles	975/- 98
* Mod.Tech.of Bioprocessing	1475/-150	* Complete Hand Book on Paints, Varnish, Resins, Copolymers and Coatings with Manufacturing Process, Formulations/Tech	900/-90/-	* Complete Technology Book on Honey Processing and Formulations (Harvesting, Extraction, Adulteration, Chemistry, Crystallization, Fermentation, Dried Honey, Uses, Applications and Properties)	1100/- 110
* ModTech.of BioGas Production	1975/-	* Manufacture Of Nitrocellulose Lacquers, Pu Lacquer, Vacuum Metallizing Lacquers And Other Lacquers With Formulations And Project Profiles	750/- 75/-	* Modern Bee Keeping & Honey Processing	375/- 40
SWEETS, NAMKEEN & SNACK		PLASTIC/POLYMER PROCESSING, COMPOUNDING, INJECTION MOULDING, ROTATIONAL MOULDING, PLASTIC FILM, FIBRE GLASS, PLASTIC WASTE RECYCLING, MOULDS, PET & RESINS, ADDITIVES INDUSTRIES		STARCH MANUFACTURING	
* Tech of Sweets (Mithai)	1050/-110			* Technology of Starch Manufacturing (Applications, Properties and Composition) with Project Profiles	
* Technology of Sweets (Mithai), Namkeen and Snacks Food with Formulae	1750/- 175			1100/- 110	
* Mfr. of Snacks Food, Namkeen, Pappad & Potato Products	900/- 90				

SPICE, SEASONING, CONDIMENTS & COLD STORAGE	MINERAL AND MINERALS	ORGANIC FARMING & FOOD/NEEM
* Technology of Spices and Seasoning of Spices with Formulae 975/- 98	* Hand Book of Minerals and Minerals Based Industries 975/- 100	* Hand Book of Organic Farming and Organic Foods with Vermi-Composting & Neem Product 1100/-
* Technology Of Spices (Masala) And Condiments With Project Profiles (Cultivation, Uses, Extn, Composition etc) 1100/-110	RUBBER CHEMICALS, COMPOUNDS	FISH FARMING & FISHERY PRODUCTS
* Spices & Packaging with Formula 900/- 90	* Rubber Chemicals & Processing Industries 400/- 40	* Hand Book of Fish Farming and Fishery Products 650/- 65
* Start Your Own Cold Storage Unit 900/- 90	* Modern Rubber Chemicals, Compounds & Rubber Goods Technology 1500/- 150	TEXTILE AUXILIARY & CHEMICALS
NON WOVEN TECHNOLOGY	* Technology of Rubber & Rubber Goods Industries 900/- 90	* Textile Auxiliaries & Chemicals with Processes/Formula 1050/- 105
* Complete Tech. of Nonwovens Fabrics, CarryBags, Composite, Geotextiles, Medical Textiles, Fibres, Felts, Apparels, Spunlace and Absorbent Nonwoven 1175/- 120	AYURVEDIC/HERBAL MEDICINES	* Tech of Textile Chemicals with Formulations 1450/- 145
PHARMACEUTICALS & DRUGS	* Ayurvedic & Herbal Medicines with Formulae 750/- 75	* Modern Technology of Textile Auxiliary and chemicals with formulations 1100/- 110
* Tablets, capsules, Injectables, Dry Strups, Oral & External Preparations, Eye, Ear1575/- 155	* Hand Book of Ayurvedic Medicines with Formulations 900/-90	* Textile Processing Chemicals, Enzymes, Dye Fixing Agents and Other Finishes with Project Profiles 1275/- 125
LEATHER & LEATHER PRODUCTS	STAINLESS STEEL, NON FERROUS METALS, BILLETS & ROLLING MILL	DISINFECTANTS, CLEANERS, PHENYL, DEODORANTS, DISHWASHING DETERGENTS ETC.
* Hand Book of Leather & Leather Products Technology 850/-85	* Modern Technology of Non Ferrous Metals and Metal Extraction 1100/-110	* Manufacture of Disinfectants, Cleaners, Phenyl, Repellents, Deodorants, Dishwashing Detergents with Formulae 900/- 90
BIOTECHNOLOGY	* Processing Technology of Steels and Stainless Steels 1900/-190	COFFEE & COFFEE PROCESSING
* Hand Book of Biotechnology 900/-90	* Modern Technology of Rolling Mill, Billets, Steel Wire, Galvanized Sheet, Forging & Castings 2500/-250	* Coffee & Coffee Processing 525/- 53
CERAMICS & CERAMIC PROCESS	* Mfg Tech of Non-Ferrous Metal Products 1750/- 175	ONION CULTIVATION/PROCESSING
* H.B.of Ceramics & Ceramics Processing Technology 1975/- 200	FOOD ADDITIVES/CHEMICALS AND SWEETENERS & FOOD EMULSIFIERS	* Onion Cultivation, Dehydration, Flakes, Powder, Processing & Packaging Technology 975/- 98
* Modern Tech Of Ceramic Products With Composition 1100/- 110	* Modern Technology of Food Additives, Sweeteners and Food Emulsifiers 1575/- 156	BUILDING MATERIAL & CHEMICALS
TREE FARMING	* Technology of Food Chemicals, Pigments and Food Aroma Compounds 1100/- 110	* Technology of Building Materials & Chemicals with Processes 950/- 95
* Hand Book of Tree Farming 800/- 80	DISPOSABLE MEDICAL PRODUCTS	TEXTILE, GARMENTS, DYEING...
MUSHROOM PROCESSING	* Technology of Disposable Medical Products 1750/-175	* Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles 750/- 75
* Hand Book of Mushroom Cultivation, Processing & Packaging 975/- 98	SOYA MILK, TOFU & SOY PRODUCTS	* Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching) 900/- 90
BIOFERTILIZERS & VERMICULTURE	* Technology of Soya Milk, Tofu, Hydrolyzate, Allied Soyabean Products with project Profile 975/- 100	* Garments Manufacturing Tech. 900/- 90
* Biofertilizers & Vermiculture 900/-100	* Technology of SOYBEAN Products with Formulae 1100/- 100	BAKERY, CONFECTIONERY, BISCUITS, COOKIES, BREAKFAST, PASTA & CEREALS
BIODEGRADABLE PLASTICS AND POLYMERS	PRODUCTS FROM WASTE	* Technology of Biscuits, Rusks, Crackers & Cookies with Formulations 975/- 98
* Modern Technology of Biodegradable Plastics and Polymers With Processes (Bio-Plastic, Starch Plastics, Cellulose Polymers & other) 975/- 100	* Technology of Products from Wastes (Industrial, Agriculture, Medical, Municipality, Organic & Biological) By Panda 900/- 90	* Hand Book of Confectionery with Formulations 900/- 90
* Production of Biodegradable Plastics & Bioplastics Tech 1500/-150	* Products from Waste Technology Hand Book 1100/- 110	* Breakfast, Dietary Food, Pasta & Cereal Products Tech 1150/-120
FROZEN FOOD/FREEZE DRYING	WINE PRODUCTION	* Modern Bakery Products 900/- 90
* Frozen Food Processing & Freeze Drying Technology 1000/- 100	* Technology of Wine Production and Packaging 1750/- 175	* Modern Bakery Technology & Fermented Cereal Products with Formulae 1250/-125
* Frozen Food Products 900/- 90	CASTING TECHNOLOGY	* Confectionery, Chocolates, Toffee, Candy, Chewing & Bubble Gums, Lollipop & Jelly Products 1750/-175
BEER, VODKA, BEVERAGE, WHISKY	* Casting Technology H.Book 750/- 75	* H.Book of Bakery Industries 950/-95
* Beer, Cereal Based Beverages, Soy Beverages, Fruit Wine, Vodka, Tea Beverages & Beverages 1100/- 110	PULP & PAPER TECHNOLOGY	TECHNOLOGY OF FIBRES
* Mfg Tech Hand Book Of Gin, Rum, Whisky, Distillery Spirits, Brandy, Fruit Spirits, Flavours, Maturation & Blending With Other Alcoholic Beverage 1250/- 125	* H.B.of Pulp & Paper, Paper Board & Paper Based Tech. 1150/- 120	* Fibres With Manufacturing Processes & Properties With Project Profiles 975/- 100
	FLOUR MILL (ATTA MAIDA, SUJI)	
	* Start Your Own Wheat Flour Mill (Atta, Maida, Suji, Bran & Besan) 900/- 90	