(b) **Mass production:** This method involves a continuous production of standardized products on large scale. Under this method, production remains continuous in anticipation of future demand. Standardization is the basis of mass production. Standardized products are produced under this method by using standardized materials and equipment. There is a continuous or uninterrupted flow of production obtained by arranging the machines in a proper sequence of operations. Product layout is best suited for mass production units.

© **production:** It is that form of production where identical products are produced in batches on the basis of demand of customers or of expected demand for products. This method is generally similar to job production except the quality of production.

(5) **Availability of floor space:**

Availability of floor space can be other decisive factor in adopting a particular mode of layout. If there is a scarcity of space, product layout may be undertaken. On the other hand more space may lead to the adoption of process layout.

(6) **Nature of manufacturing process:**

The type of manufacturing process undertaken by a business enterprise will greatly affect the type of layout to be undertaken.

(i) **Synthetic process:** Under this process two or more materials are mixed to get a product. For example, in the manufacture of cement, lime stone and clay are mixed.

(ii) **Analytical process:** This is just the reverse of synthetic process. Under this method different products are extracted from one material. For example, from crude oil, petroleum, gas, kerosene and coal tar etc. are extracted.

(iii) **Conditioning process:**

Under this process the original raw material is given the shape of different products and nothing is added to it. Jute is an important example of this kind.

(iv) **Extractive process:**

internal transportation and other operations pertaining to production. This model diagram is prepared on the paper.

(c) **Templates**: The area covered by a machine is cut to scale from a thick paper to form a template. Not only machines but space covered by furniture, equipment and other components can also form a template. These can be well arranged representing the actual plan of layout to be undertaken.

(d) **Models**: Three dimensional wooden models of machinery, equipment and other devices and components can be prepared. By seeing these models even a layman can form an idea about the layout of the plant. But this technique is very costly and only big concern can afford to install such a measure.

(e) **Drawings**: Layout drawings can be got prepared by drafts men showing walls, stairways, machines and equipment etc.

(f)**Machine data card:** These cards are tied with different machines operating in the plant. These obtain valuable information regarding various salient features or characteristics of machines viz., efficiency, capacity space area covered by the machine and technique of operating the machine etc.

Travel Chart

Simple table that is useful where there are multiple and irregular movement between places travel chart is also known as from two chart as it depicts the entire material flow between various pairs of department. It records distance and frequency of moments between various department as it travel chart is quite significant in process tightly out decision and has no relevance in product layout.

REL (Relationship charts)