SCIENTIFIC MANAGEMENT

- The utility of scientific methods to problems of management was first introduced by F.W Taylor

Def 1: "Art of knowing exactly what is to be done and the best way of doing it"

Def 2: Application of scientific knowledge and the scientific methods to the various aspects of management and the problems that arise from them.

- It tries to make the best use of production resources (men, machine, material, capital etc.) – i.e Optimum utilization of resources

- It discovers economical and efficient methods of production so as to reduce effort and eliminate wastage of time and motions.

- It provides right person to right. job

Principles of Scientific Management

- Development of science for each element of work:

  Analyse the work scientifically rather than using a thumb rule. It means an attempt is made to find out what is to be done by a particular worker, how he has to do it, what equipment will be necessary to do it. This information is provided to the worker so as reduce wastage of time, material etc and to improve the quality of work.

- Scientific selection, placement and training of workers:

  This principle states that select the workers best suited to perform the specific tasks, and then train them within the organization in order to attain the objectives of the enterprise. This eliminates the possibility of misfits in the organization and ensures better working . Workers should be trained from time to time to keep them informed of latest developments in the techniques of production.

- Division of labour: Separation of planning function from doing function)

  Division of work into smaller tasks and separation of thinking element of job from doing element of the job. This is the principle of specialization. It is essential for efficiency in all spheres of activities as well as in supervision of work. Taylor introduced functional organization, in which one foreman was made in charge of each function.

- Standardization of methods, procedures, tools and equipment:

  Standardization helps to reduce time, labour and cost of production. The success of scientific management largely depends on standardization of system, tools, equipments and techniques of production

- Use of Time and motion study:

  Taylor introduced time and motion study to determine standard work. Taylor undertook studies on fatigue incurred by the workers and time necessary to complete the task. Taylor suggested that for increasing production rate, the work of each person should be planned in advance and he shall be allotted a definite work to complete by a given time by using pre determined method.

- Differential wage system:

This helps in achieving high level of optimum output. It distinguishes the more productive workers from less productive workers and motivates them to produce more. Taylor believed that if labour is suitably rewarded and satisfied with job, he will work whole heartedly to achieve the objectives of the enterprise.

- Co-operation between Labour and Management:

It provides proper and effective leadership. The labour starts thinking that it is their work and they must put their heart and soul in the work assigned to them. In fact the main job of scientific management is to revolutionize the mind of both workers and management for mutual benefit and also for the benefit of the eneterprise.

- Principle of management by exception:

  In order to make effective utilization of time of top managers, Taylor suggested that only major or significant deviations between actual performance and standard performance should be brought to the notice of top management. Top management should pay more attention to those areas of work where standards and procedures could not be established and where there is significant variation between standard performance and actual performance.