

Statistics

Ques-1 Define statistics?

Ans Statistics can be defined as the collection of and presentation & interpretation of Numerical data.

Ques Merits & Demerits

(i) Merits of Statistic

- Comparison of Alternatives : Because a Business includes more than just one person there will always be so many ideas proposed that union members or the mgt. team need to discuss & choose from.
- Statistic is beneficial in research & development. It is beneficial to calculate performance of mgt. & evaluation.
- It is beneficial in collection of factual data.
- It is helpful in projection of future events.
- It is helpful in Business operation.
- It is helpful in attracting the customer.

Limitation and Demerits of Statistics

- Hard to understand :- Mathematic is one the most difficult subject for many students &

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is branch of mathamatic is also equally hard to understand for many people.

- estimated frequency In business stastics are done an estimated frequency which may not be neccassary what are the consumer wants to know and this in the end may lead to result with error.
- limited sample size In business small sample size are taken by the businessman but these sample size are not able to explain whole business
- Misuse of stastics Company that compare their productivity with other companies may end up into losses if they comparing with didn't provide adequate result.
- It is very time consuming

Importance :->

- (i) Advantages stastics is mayor applied in advertising stions that investor know where is invest their money & get best out of it.
- (ii) Division most highly Making with every decision made our know that it could lost the business or crush it down that is why

Some statistical evaluation is always applied in business decision making.

- ③ Market Research is in fact the area in which statistics is highly applied with the.
- ④ Future Forecast Business operation use data from the past & compare it with the present to come up with future prospect what can come out of the business with the help of statistics we can forecast about the business.
- ⑤ Profit analysis without analysis profit there is no way one can know if they are actually developing or not with the help of statistics we can analysis the profit.
- ⑥ Performance evaluation → with the help of statistics we can evaluate the performance of employs.

Meaning of data

The word data is Latin in origin & literally it means anything that is given. Before one can present & interpret information there has to be process of gathering & sorting data just as trees are raw material from which paper is produced so too can data being called as the raw material from which information is obtained.

~~Factors~~ or figures from which conclusion can be drawn.

Types of Data / Features of data.

- (i) Clarity: Data should be necessarily display to existence for communicating the sense of matter without clarity the meaning of communication will remain hidden.
- (ii) Accuracy: Data should be real, complete & accurate. It is an important property of data. Since data offers a basis for deciding something they must be accurate. If valid conclusion are to be withdrawn they must be accurate.

Clarity

Essence \Rightarrow In s.s large quantities of data are collected which can't be presented, nor is it necessary to present them in that form they have to be compressed & refined data are always the essence of matter

* Aggregation \Rightarrow It is cumulation or adding up. for ex \Rightarrow monthly data are added up to form a consolidated annual cumulation

* Compression \Rightarrow Large amt. of data are always compressed to make them more meaningful to present the essence of the matter. it is necessary to compress data.

* Refinement \Rightarrow Data require processing or refinement when refined they are capable of leading to conclusion & even generalisation. this refinement can then discover new facts.

TYPES OF DATA

i) Primary Data \rightarrow The method of collection of data depends upon the nature & scope of the inquiry. If the investigator prefers to collect the data himself for the purpose of

inquiries & uses the data it is called collection of primary data.

Secondary data \Rightarrow This data refers to that statistical material which is not originated by the investigator himself but still he uses the data collected by somebody or else else by some agencies. Once the primary data are collected & published it become secondary data for the investigator.

D/F b/w P/S Data

- (i) Originality of data: Primary data are original in nature as they are collected by the investigator for their own use. On the other hand secondary data are not at all original in nature as the investigator uses the data collected by some other individual or institution.
- (ii) Objective: \Rightarrow Since the p.d are collected by the investigator themselves to suit their objective from this is no need to revise the objective of data collection. On the other hand the objective of using s.d or may not be identical with the objective of a user of primary data.

Source of Data

Primary data are collected by the investigator himself on the other hand secondary data may be published or unpublished these data are collected by other user so they are called secondary source of data.

Time Labour & Money.

The collection of primary data involves more labour time & money in relation of collection of data is recognised.

Degree of Accuracy desire
The degree of accuracy is more in case of primary data than secondary data.