Population Sample and Sampling,
$\Rightarrow$ Population:
"An entire and whole number of indiridest subject, People object having Somme Poblesy chracterstics for research study".
$\Rightarrow$ Target Population:
"The Population in which the research are intrested to research study""
$\Rightarrow$ Accessible Population:
"Number of available subjects:"
$\Rightarrow$ Sample or subject:
"A. Part or subject os Population selected by the Researcher for research study and to ask Participated."
$\Rightarrow$ Sampling:
"Process of collecting or selecting Sample'"
$\Rightarrow$ Sampling tame:
"It is the list of all elements in Population?"
$\Rightarrow$ Sampling error:
"It is the change in the value of statics or faulty Sampling technique".
$\Rightarrow$ Schematic Persentation of sampling:
Population
Target Population
Accessable Population
$\downarrow$
Sampling
$\Rightarrow$ Purpose of Sampling:

1. Economical Purpose:

The researches Can Save lot of money, time, and research Source.
2. Improved quality of data: researcher Con improve the By use of sampling
3. Quick study result:

The Sampling Possible to generate study result faster.
4. Precision \& acquracy of data: More Precise data can be generated if it is a small Sample.
$\Rightarrow$ Chracterstics of good sampling:

1. Repersentative: Simple
2. Free from Bias \& error
3. No substitution \& incompletress
4. Appropriate Sample size.
$\Rightarrow$ Sampling Process:
Identify \& defining the target Population.
Describe the accessible Population and ensuring sampling frame.
spacify the Sampling unit
specify Sample collection method,
Sample size Sample Plan
Select a designs Sample
5. $\Rightarrow$ Identify \& difining the target Population: This is the first step of Sampling Process. In which identify the target. Population.

The population in which the researcher are intrested to research study.
2. Describe the accessible Population and sampling
Fame:

It is not always Possible to access each subject including in target Population accessible population. Which is: really available:
2. Specify the sampling unit:

Researcher must establis -h-a spacific inclusion \& exclusion critearea to select a Perticular Sampling unit.
4. Spacify Sampling Collection method:

It is the most important step of Sampling Poaess where the researcher decide rather sampling will be draw from the Popictation by frothed. using Robability \& nom-Bebability
5. Deteronine the Sample \&ine:

It is very essential to determine the sample sine so that... the researcher con Plan and implant the research Process.
6. A spacify sampling Plan:
the sampling Plan the By spacifying Process tan be implanted without tony Problem.
7. Select desired Sample:

Finally a research draw a repersentutive sample of the accessible Population.
$\Rightarrow$ Types of sampling: (Methods/techinique) method Which are follows -
a. Probability Sampling:
i. Simple random sampling
ii Stratified rierdom Sampling
iii Systematic Random Sedrinpling v. cluster
2. Non -Probability:

1. Purposive Sampling
ii. Convenient Sampling
ii. Convenient Sampling
iii. cOnsecutive Somplichg
iv. Quito Eanpliny
v Snoi-ball Sating.
$v$ Srion-ball sampling.
2. Probability Sampling: II is the based on the theory of Probability. It involve the random onu>selection of number of Population -in the every subject in the Population hos equal chore f ce to select -a research study.
$\Rightarrow$ Features of Probability Sampling technique:
3. It is technique where the Sample have equal chance to being selected.
4. The advantage of these Sampling is absence of biase-and error.
5. The sescircher utilise Randomization.
i. Simple random sampling:
basic Probability Scmpli t halite In this every number of Population has an equal chance. there is need of essential Prerequisitis Population should be homegenous- must have the list of elenets on amber of access able Population sap is drawn From Sampling Frame by useiny these method-lautery method, flop coin ti
$\Rightarrow$ Advantage:: i.) Equalichance
ii.) Erie e from bias
iii) Recquie minimum K Kinouladge about Popubtii
$\Rightarrow$ Disadvantage : i) Require more time.
ii.) It is vern widely \& disappeared.
ii: It is very widely disappeared.
iii) Impossible to contact the Case.
vv.) It is completly cataloged universe.
ii: stratified random Sampling:
use for the hetrogenous This method is random, Sampling is the Probubility Sampling random sampling where the re reseastyer dan aider entire Population into different honegonew Finally i select the subject
froe the different stouter.
$\Rightarrow$ Types of sRA:
6. Proportionate Sampling: Select From the each sta ta. Which is directly Proportionate to total Population. Ir which simple fraction is (sample) Same. Sample
sizedifer A

$$
B
$$

$$
c
$$

1. Population size.
2. Sample Faction
3. Sample 50 -100 150 size
4. Disproportionate Sampling: not Proportionate to total Population. In while h sample fraction is not some.

|  | Stratum | $A$ | $B$ | $C$ |
| :--- | :---: | :---: | :---: | :---: |
| 1. | Population size | 100 | 200 | $\therefore$ |
| 2. | Simple fraction | $1 / 2$ | $: 1 / 4$ | 300 |
| 1. | Sample size | 50 | 50 | $1 / 6$ |
|  |  |  | 50 |  |

$\Rightarrow$ Advantage: i. $)$ Reduce selection of biase Ensure -
ii.) It need mall all groups in a Population.
ii.) It need small sample size that save time money 6 efforts.
$\Rightarrow$ Disadvantage is It is not used for every study.
ii) Line Population must be available from wortich to select subject.
iii. Systematic random Sampling:
technique selection of Sample frompling Rath case. From list of group. Such as every 10 th Person of Population. every hundred

The desire Sample sine is establish at a Sum/tatal (n) and the sine of Population must be estimate (N)

Ex. The researcher Wart Select about 100 Sample From of total target Population of Ko hundred. People.

$$
\text { Neth }\left(k^{+h}\right) \text { case }=\frac{N}{n} \cdot \frac{500}{100}=5
$$

$\Rightarrow$ Advantage: i.) Researcher find this technique Converviet - simp re to carry out.
ii) Distribution of Sample is special evenly over the entire given Population.
$\Rightarrow$ Disadvantage: i.) Sometime this may, result in biased sample.
ii:) It first subject is no ranctomh Select then it
ii:) It first subject is no randomly select then it
becomes a nonrandom sampling ted tiviquo: becomes a nonrandom sampling ted trifue:
IV. Sequential random Sampling:

This method of Sampling technique slightly different from otherSampling techs iquel reason, the Sample sire not fixed.
$\Rightarrow$ Advantage: The content add removed
In this Sampling technique the researcher initially select the small Sample and triesil out to make inference (Result), if not able to draw a result then add more Subject until clearcut result can be drawn:
$\Rightarrow$ Disadvantage: Sample sire is not fixed.
v. Cluster/Complex random sampling: I grape one sampling In very large Population Selection of geographical cluster
and than Condoms Selection Iran these cluster.

Ex. The researches want to survey the /research. the acadmic Performance of high school student in india. First he Can devidel entire Population into "different cluster (cities and states) and them the researcher select the sample from these cluster.
$\Rightarrow$ Advantage: i. $>$ Low Cost \& high frequency of use.
$\Rightarrow$ Disadvantage: i.) multistage very expensive \& validity
depends on other method used.
2. Non Probability Sampling: Where the sample are gathered in a Paces that does not give allindividual in a Population equal chance in other ward... in this type of sanding technique every subject doesint hand equal chance $f$ because elements or samples are. select by "choice not by chance"
$\Rightarrow$ Features of non Probability Sampling:

1. This type of sampling technique every subject does'nt oh ave equal chance because elements on samples are select by "choice not. by chance".
2. In non probability subject and sample usevally select on the busts of $\therefore$ asrassabillity or avalability.
3. In this sampling technique the most limeoncher are bound Work Force and because time and Work Force and because
these limitation it is almost impossible to charice every individual.
$\Rightarrow$ Types of nom probability sampling: Subject are selected to be Part of
sample with a spacific Purpose in min in this type of singling the research o require endupt 1 ronouledg about theaccessible Population.
F Advantage is simple to drin sample e useful in explorative studies.
ii. Save resciuces, requires less field work.
$\Rightarrow$ Disadvantage: i.) Reacquire Considerable about the
Population under study. Population under study.
ii. It is not always reliable sample, Las coricios
biases may exist. biases may exist.
ii. Convinent Sampling:

Sampling technique. Who it no the Pol Subility are selected because of there Convinient accessibility Cravalability) of the kescercher.
Ex If a researcher wont to Conduct a study on the. olden People laving
in silicon. The Gesearchics observe in silicon. the Researcher o
the he Can met Several older People Coming from morning Walk in a Pools he is an select these older People as is eresearich subject.
$\Rightarrow$ Advantage: i. It is considered easiest, cheapest \& least time consuming.
ii. It may hep in saving time, money \& resources.
$\Rightarrow$ Disadvantage:
i. It does not Provide the representative Sample from all Population of the study.
ii. Finding generalised/genrted From these Sample Cannot be generalised on the Population.
iii. Comspentive sampling: / whole/ total soling to Convionent Sampling Where except that if Sea, to s fain to induce the all accessible subiejct is a Part of the sample. It it absolknown total sampling, the researcher Pick all the araildable subject Whoars mitting the Preset incision and exclusion Criteria.

Ex. The researcher $\omega_{a}+\frac{1}{0}$ study the activity Pattern of Post kidfrey trimsplartation. the researches Can reffed all the post 1 xideney transplantation to met the inclusion \& Exclusion Esiteria.
$\Rightarrow$ Advantage: i.) It is very little effort on the Part of researches when Performing this Sampling technique. It is not expensive, not time Consloming \& Work farce intensive.
ii. Ensure mare repasentativeness of the selected sampling
$\Rightarrow$ Disadvantage: $i\rangle$ It always does not guarantee the section of repersent five sampling.
ii. The researcher has not Select. Plan about sample giber sechdule.
Iv. Quota Sampling:

Sampling technique where the researthor ensure i. equal os. Ropostionate repersentation of the subject or sample from each quote.

The Basis of quota is useveally as age, gender, race, education, solo recons
$\Rightarrow$ Advantage: i. $>$ Economically cheap, as there is no need to approach all It he 'Candidates.
ii. Suitable for studies where, the field work has to be Carried out like studies related tomarked \& Public opinion Polls.
$\Rightarrow$ Disadvantage: i.) No Possible to estimate $\angle$ error.
ii. Bias is Possible as invastigatar, / briterviewer Con Sect
Person tinowon to him. Person known to him.

D- SNow ball sampling:
Sampling technique r that is used by the gereseaicher, to identify the - Subject Which are "hard Otto locate"

Ex. Drug abuse, HIE Patient, Commercial So
Workoles etc.
In this type of sampling technique after select the initial ar first sample and astr. the subject or Sample to nominate other Person with trades. So the researcher obuerve the nomin ate subject Continue in th same way until the sufficient numbs of subject arse oftain
$\Rightarrow$ Advantage: i) The Process of Sampling is cheaper
cost effective
ii. It require lessen Work force..
iii. Little Planning as Compared to other method.
$\Rightarrow$ Disadvantage: i. . The researcher less. Control
over the Sampling: method. over the Sampling; method.
ii. Sampling Process not guarantied.
iii. Sampling bias is also a matter of great -
Condemn for the researcher.
$\Rightarrow$ Types of snowball Sampling:
A. Linear Snow bull Sampling: In this each Select: Sample is asked to Provide Reference of only one simill Subject.
B. Expantial (Non discriminative) Sampling: Sample number is asked to ProvideReferince of at list two s'míllos Subied.

c. Non expontial (discriminative) Sampling: this Sampling technique initillay one sample is selectes and astr to s -refinance out of which only one is active to give reface and another is not active.

$\Rightarrow$ Factor affecting Sampling:

1. Nature of the perearchor::
i. Unexperience investigator: (Researcher) researches lack of adequate trowladge, and experince about the-reseasch.mat advessly affect the research.
ii. Lack of interest:

Lack of self motivation and interest can affect the result of the Sampling.
iii Lack of honesty: in each step of research Process.
Iv. Intensive work load:

Ladon adequate -
Work blood resources and intensive worklod willadversly affect sampling process-
V. Inadequate Supervision: There should be adequate Supervision of research cretivity For appropriate implementation of resect process.
2. Nature of the sample:
i. INappropriate Sampling technique:

If the
Researcher fails to choose os select an appropriate sampling technique. the Whole pisces may get affected.?
ii- Sample sine:
very large staple do not. exhibit chracteastigs of Whole Population if the Sample is too Small. the researcher merry not be able to generalised the study
iii. Defective Sampling frame:
should bane adequate Knowladgeserschor the Population under study to have an appropriate Sampling rome:
2. Other: (Circcomstancess)
i. Lack of time:

Adequate time should. be available with the seseacher to have an adequate Planning s implonoritation of a sampling process. of
ii. Large geographical area: to accomplish the sampling pRocess.
ii: Lack of Co-operation: (Eacibility): During Splay Process reseacher need co operation from authorities. as well os the study subject.

- iv. Natural clammities:

Some time the
Sampling Process is affected by nation clammites such as earthquake, Floods and other enutromentaf condition.

UNIT - $\mathbb{I}^{\text {th }}$

Tools \& method of data collection
$\Rightarrow$ Data Collection:
Data cire observable and measurable fact that Provide information about the Pherromenon under study. In research study there are two type of data Primary \& secondary delta.

Before collecting data there should be ask s question or 5 "UH" of data collection.
A. What data is to be collected
B. From whom date is to be collected
c. Who will date collected
p. From where the data will collected.
E. When data to be collected.
$\Rightarrow$ Source of data:

1. Primary Source:

People, object, Programme, institutions etc.

2 Secondary Source:
A. Internal Source: Biography, letters, dice memories.
B. Externaf Source- Publish t fensafe, eugene,
newspaper, report, mald Communitation, unpulls hed (thesiss, repost, Patient documentation.
$\Rightarrow$ Types of mothods of data collection 1 tols of data collection:

1. Tenterview:

Five type:-
i. stauctured / directed inteview
ii. Unstructure / Non-direted interview
iii. Semi structure interview

1v. Indepth interviens
V. Focous. intervies

V1. Telephonie interview
2. Questiormaige:
i. Open ended question / epen format question.
ii. Close ended Question:
A. Dichotomus Question
B. mcos
C. Gafetesia
₹. Rank order,
F. Rating stigè
F. Rating steió
9. Dmpuh tant Inestion

H likest Arwestion
I. Bipolar question

I matrix
z. Comprestion Attitude Scale:
i. Likest Scale
ii. Semantic differmitial Scale
iii. Ra vas (visual analogue scale)

- Functional ability

4. observation:
i. Stencture
ii ionstancture
iii. Participate
Iv. Not Participate (Eves drop)
5. Rating Scale:
i. Graphical
ii. Discouptive
iii: Numerical
iv. Comparative
6. Check list: Process in sequence
7. Biophysioloyical method
i. Invielo (with in the body)
ii. Invitro (out side the body)
8. Projective technique:
i. Association technique (Word association technique.)
ii. Complition technique. (Fill in the blanks)
iii Construction technique =RAD Renter y
v. Expressive गासा
v. Choice ordering.
9. Qriorts
vignettes Sensetive create instil. case
10. Interview:

The interview is the Process of Communication or the interaction in Which the subject or interviewing /l interviewee give the needed inforntoration Verbally in of face to face situation-0 telephonic.

Interview is a Popular way of gathering information in qualitative

Interview Provide a wide serge
data. of data.
$\Rightarrow$ Definition:
"A method of data collection in which one Person (Interviewer) ask the question From another Person (Interviews. Which is Conducting either face to face or telephonic".
"An interview is a Conversation between 2 ar more People (Interviewer or Iostervievee) Where question are asked by the interviewer optain information from interviewee".
$\Rightarrow$ Chracterstics of interview:

1. The Participants an interviewer and inter viewed are stringers.
2. The relationship between the Priticipates are trended (5) one.
3. Interview is made af captaining verbal answer to question Putted verbally.
4. Interview record in formation which is given by nespondost in the interview
5. Interview is mare Casciaf Convesation exchange, but a Gonversation with a spactic Puapofe.
6. The intenaction beifoen intenviewerond intriviewee meed not nessassy be tace to fece-becuse intervien $\theta$ is also monducted by telephone.
7. Rstervien not a standerised Prespose it con be modiy fy accosdisy to situction
$\Rightarrow$ Bemifit of interuiew:
8. Provide indepth an defail Mformetioi
9. Permit grater deptl of rerponse os information.
10. Fake date from illemate subued cer Person.
11. Provide higher respornse,
S. Cleanyfy misurderstemding
12. Ask question-aerat several bevel.
13. Helps together. Supplimentory information.
14. Acquracy com be check by use of spacial devices ( visual s scoring f devices)
15. Flexible addap table.
$\Rightarrow$ Interview Process:
Include following step:
16. Preparation for interview
17. Preinteqview introduction
18. Developing rapport
19. Carrying interview forward dir

5: Recording the interview
6. closing the interview

1. Preparation Jos interview:
i. Fix up appoint mont
ii- Appearance \& dress
iii. Fomilty with the interview Sechdule:
2. Preinterview introduction.

Researcher mint be introduce himself, os herself to all responds or subjects or interviewee.
ii. Identify the responded by name expo
$\therefore$ iii Explain the puepere of inertia.

IV: Explain the fumat of irteonies.
₹. Pevelopirg sappoit:
i. After Pimany ivitroduction the geraxdo start daveloping sappoot with rei besporded
ii. It is very nessassyy to establish a betho, IPR
4. Careing intorivion for, vard:
i. Stant the inferview askionly oncipuertion at a tirne.

- Repet a suestion if nesseisisy.
- listen Conetully to s-bjeris inswerf.
- Observe the Eubjects facial expramiontore of vice and body lamyunge
- Do not show thet sign. oll siupperitr slact and amper.
- Allow the subiect sufficient timeto give answer
- Do not hurry the iontervixw
S. Reconting the inteavieni
i. If is essential po frec-il-lie xespore
ii. Caood irrfornvation con be cheileen by inate
tolzingy.
iii. A tap recorder should be use, the rosprose of the -resparieds recording.

6. Closing the intervieer:
j. After the inatervizer is over, a polit leave of the geiponded should betaken, thinking firm os il hes with a friendly smile and good buy

$\Rightarrow$ Types of Interview:
I. Structure ónterviev When i It is mean of datacollection in which the intervielves has an inteqvieri sechdule. In which the question are listed in order.
$\Rightarrow$ Advantage:
7. b) Arovib $\forall$ ap
8. The repersentative sample is Possible result can be use to make.
9. Question are structured $\$$ So that the responded fan answer more easily.
$\Rightarrow$ Disadvantage:
10. Responded are forced to choose between the Ulternative answer.
11. Time consuming in term of data collection
ii. Unstructure inter view:

In this inethad the question can be changed according to respondent -de intiligency, understanding and belief. In this type of interview there is no PerePlan sechdule.
$\Rightarrow$ Advantage:

1. Better understanding of the (working dey)
$\because 2$ Pt is very flexible and moire comfortable.
$\Rightarrow$ Disadvantage:
2. There are chance to get diverted of the entire intervieior log ns ज्ञा $t$
3. might also Create a negative openion-
$\therefore$ about the organisation.
iii. $\Rightarrow$ Semistructure intovies:

It is a flexible methed that allow now question to bi briouglt up duaing the inkvien. despanding uperif the
$\Rightarrow$ Adventage:
Fecedor allows informates the ferm.
2. It Can Provide Teliable, Compairable Iualitat -ive data.
$\Rightarrow$ Divadvange:

1. Interviering skill are Secquired lack to maintain Confidenciality.
2. Irdepth interview:

This is an intensive and investigator interview ainduct and airrad at study in the eespondents openion and - emotions on the basis of mboview quide this recquire moa traning and interpersonal skill. It helps to glicit Personal foeling and emstions.
$\Rightarrow$ Advantage:

1. Responded thetananswer, Question as muchdetal as they wont:
2. An informal atmos phere that encourage the
$\Rightarrow$ responded to be open/offer \& ones.
$\Rightarrow$ Pisoduontage: ...
3. It is difficult to directly to compass the result. because. these interviled is
$\therefore$ Pique:
4. This can be conducted on snillumber of interview
V. Focus group interview.

It is an unstucture group Where the 8-72 member are brought. A orether under the guidance: of trained intervieller to focus on a specific Phenomena the research o tries to focus his/her attention on a Particular aspect of Roblem.
val. Telephonic interviews:
It is non. Personal method of data collection in this method the collection
ii of information is done by telephonic contact or on telephone.
$\Rightarrow$ Advantage:

- Interview can be Complited quickly \& fairly
- Can be used to reach sample over a wide geographic area:
$\Rightarrow$ Disadvantage:
- Question Cannot be of a Complex nature.
- More expensive method and time Conscoming.

2. Questionnaire:

It is the most Conducting method of research: a questionnaire is a Plans self reported form design to elivat information by a written or verbal response of subject.

- A questionnaire is a structured instrument Consisting of a series of questions Ped pair by the reerercher subject ask to complete to -gather data from individual about knowladge, attitude, belief, openion and feelings.
$\Rightarrow$ Types of Questionnaire:
1: Open formate (open ended Question)

2. Close. Formate (Close ended Question)
3. Open ended question:

These are those questions Which Provide apportionity to responded expires their cepenion.
Ex. Explain your epenior about the quality of
heath Care Services in roulasthan.
2. Close ended questions:

These question offer ǵespandere a no. of alternatives replies from which the subject select the openion that most likely makes appropriate answer.
$\Rightarrow$ Types of close ended Question:
i. Dichotomus Question:

This require responded to make a choice between two sesponses such as yes/No, male f Female.

Ex. Have you ever be hospitalized Yes/No.
ii. multiple choice question:

These question reacquire the respondent to make choice between the than two responses.
Ex. Which of the following disease is sexually

- DM, HI, Hypothyroidistn, syphilis
iii. Cafe trim:

These are spacial type of multiple Choice questions that ask the reppondors to select a response them is most likely Correspond to theis view.

Ex. What do you think about-homone seplecemant therapy.
A. St is dangerous should be avoided.
B. Cornice should be Concious while using it.
C. I am uncertain about my view.
a. It is benifitial should be avoided.
iv. Rank order

These question are ask to Respondent to rank their response from most Favorable to least furourable.

Ex. What according to you is mast important for yous life.
$\rightarrow$ money, education, family, health.
v. Gontigency; A question that is ask fur than discription only the respondent give vier particular response to Previous furfur.

Ex. Are you stressed [yes/no] What is the
v/. Rating scale:
judge Something along and ordered domain.

- Responder nt is ask to rate of particular issue on a scale that range firm Pass to good.

Ex. How you rank the education quality
in india.
a. Good
13. Tais
c. Pos
D. Very Poos.

V1- Importance:
In this responded are ask to rate the importance of Particular issue on a rating Scale this helps to know that the thirigs or issues are important to a responded.
Ex. Exercise everyday is --ta for the hel th

1. Extremely important
2. very whenportant
3. Song what important
4. Not important?

VII $\Rightarrow$ Likest sedate: Question:
It helps to know how strongly the responded agree with the Perticulls statement these question helps to access how respondent team towards a Certain issue.

Ex. This Community is good Place to raise
$\Rightarrow$ Bipolar Question:
$B \cdot Q$ are Question that hove two exterme answer responded has to mark his or her Response opposit end of the scale.

Ex. What is your openion Preference here.?
A. I like to go for walk, I like to watch movie.
ix. $\Rightarrow$ Matrix Question: (Calender Question)

It include multiple questions and identical response Cotagory are assigned
question are place one under another.
3. $\Rightarrow$ Attitude Scale: (composite)

Composite. Scale are Socio -psychological measurment which are diver attributes or chracterstatics such as telling
perception, epenion. Perception, expenion.
$i$. $\Rightarrow$ Livest scale:
Likest. Scale was named after the Psychologist' Persis likest who devdope it in 1932 as Psychological Concept. it was develope to measure attitude, belief, Feeling, cepenion of a people.

Pimaryly orignal version of thie Sole Was dovalopte in J( 5 Point scale I Containing the mixture of Pasitive cond negitive

1. strongly agree.
2. Agreal
3. Disegree
4. stangiy disagnee
(agresoment and disagresernent statement)
segarding movevomant of the variables.
$\Rightarrow$ Definition:
"Likert Scale is a Compesit -rosasue of attitude that mvolue Submision. of Score on isset of itemus (Statmont) to which Fespandent ase aisk toindicute there degrae of agrasment pand diragreament".
Ex. IKERT SCALE to arsex the copenion with HIV ADOS
5. Pesson with
multiple sexual
Postra coe of
high sík of
AIDs
6. You Can get

Acids by shooing
utensil
3. You may get Aras

We shaving diddles
4. Ales curable disease.

| $x$ | $x$ | $x$ | $x$ | $\sim$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $x$ | $x$ | $x$ | $x$ |
|  | $x$ | $x$ | $x$ | 2 |

$\Rightarrow$ Scoring of likest Scale:

|  | Statant | $S \cdot A$ | $A$ | $U$ | $D$ | $S \cdot D$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | You Com jet Bass | 5 | 4 | 3 | 2 | 1 |
| 2 | by sharing utensil | 1 | 2 | 3 | 4 | 5 |

$i i \Rightarrow$ Sementic Differential Scale:
SDS is a most effective and most widely used technique now a days. Semantic differential question. measure Peoples operion attitude towards stimulus, Words, object and any Concept, these avestion Consist) of contrastive adjective Paps (Good-bad, Benifitiaf-Haomful; Happy-sad) listed on apposite end of bipolar Scale

- EDefinition:

It is a type al riating scals
to measure Comtative meaning of objective, everts cond Comcept, thase Conition ore use to drippe the Gespondant abtitudes toward the object event inal Concapt.

Adjective Peien use Fo, Constaction oo simantic differinci! Scale.hconestdishoncet, Cocial-Antisocials hard-Soft, flowent strage-weak, Active-Passive.
iii. $\Rightarrow$ visuaf amalitis Ecal (vas):

It is widely.
used Psychomotos presponse scale which is mearuement insteument tos Subjective chracterstatios os attitudes that Gan not be directly measure.

VAS is use to measure intensity of certain sersoction and Feeling such as Pain, discomfort, anxiety, alertress.
$\Rightarrow$ SDefinition:
vas is a tool use to help a Prason rate the intensity of Cortain Sonsation Such as Frizi

Ex. The vas for Ron is a straight tine with no Pain at one end the suet Painat the other end.
4. $\Rightarrow$ Observation:
observation is a way of gathering information on data by watch ting beffuious, events, noting Physical chasterstatic in there natural certificate.
observation is the method of data collection that can be used together such information as chractesstatics and Condition of individual by verbal and non verbal Communication.
$\Rightarrow$ Definition:
"Observation is a technique for collecting all, the data-or acquiring information through Voccusna that Can be observed through sense. With without mechanical device."

It is two Part devices to collect datafon study that induce and observes (Someone hin is observing) and observed there something is to be observed.
$\Rightarrow$ Use, importance of observation:

1. To understand an ongoing Precess and situation.
-. To gether data on individual behaviour on,
interaction.
2. To know about the Physical setting.d
3. Data collection the other method are not Posilde:
$\Rightarrow$ Types of observation:
i. Structure observation:

In this method reseal -richer in advance Prepuir, structure or Semistiucture tool to observe the Phonomina under study.
Ex. checklist
$\ddot{\mathcal{F}}$ : Unstaucture observation:
In this method ressea -sher iss not advance Prepaid, No structure or Sernistructure tool to obsere the Phenomina under study. Unstructrere obresivation is carried out by using

Ex. Field diary

II $\Rightarrow$ Participate obresuation:
Historical and field research have been associate most strongly With Participate observation, during Participant observation unstructioned tool aref use to collect the data such as field diary.

IV $\Rightarrow$ Non -Participate observation : (Eaves dropper) In non Participate observation the observer Work as a sues droeper (secretly listening or observing) in this technique the observer is not a Participate in the setting but it is
viewing the situation. viewing the situation.

In addition People are observed without there knowladge that they are being observed.
Ex. Psychologist to study children on discovery.
5. $\Rightarrow$ Rating scale:

Rating is the team use to express the openion and judgement regarding Performance of the Person object situation and the rating Scale involve mostly qualitative aspect mothy
Aualitatre aspect thistas and a Person. Pualitative aspect thistys and a Person.
$\Rightarrow$ Definition:
Rating Scale refers to a Scale with set of openion, which describe varyindegres of dimension of an attitude being leered Or
4
Rating scale is a device by which Judgement may bet quilifed or openion Concerning a traits Can be systematized.
7 types:
Ti. Graphical rating Scale:
Performance is Printed In this. Scale the Point from lowest to higher It include neimaricaf point on the Scale.

Ex. How much are you satisfied with noise Pollution in your city i

Least most
ii. Discruptive rating Scale:

This type of rating Scale do not use numbers but devide tho assessment: into series of verbal Phase to indicate the level of Performance.

Ex Judge the level of Performance of nursing personal in medical Pcu.

Nursing Personnel

1. Raiesty
2. Suresh
3. mukesh
4. Kamlesh
ACtive

11F: Neumarical rating Scale:
It devide the evaluavation criteria into the fix number of Points but define only number at extreme. in this scale eq $h$ statement is general assigned a neumerical Score franiong From: 1-10 :or even more.
Ex. Pain See:
$\qquad$
IV. Comparative rating Scale:. of rating Scale the Researches make a judgement about on attributes/ chractlerstatics / Qualities of a Pessonby Comparing it with that of a simillas another Person.

Ex. Ram desigen snaking ability stronger than the Mr. shayem oe gopal.
6. $\Rightarrow$ Check list: (Activity/ Process in Sequence)

It is one of the most commonly use instrument for Performance evaluat tion it Consist of a listing of steps, activites - and behaviour. While the observes Recorded uther an incident/ Rocedure becur. the observer has to 'Judge certain behaviour has to taken-Place.
$\Rightarrow$ Definition:
"A checklist is a simple instrument listed of expected items of Peiforninace. or attributes, which are check by the Researcher."

Ex. Check list for evaluation of Student Performance during surgical dressing. Dtems/Behavicur / step /activites

1. Explain about Procedure.
2. Collect Nessessary
equipment
3. Arrangement equipment For conviniant use
4. Prepair Patient

इ. Wash hand
6. maintain aseptic technique
7. Remove dressing,
8. obseave Condition of Wound
9. Clean Wound
10. Apply dressing

11 Romole equipment
12 Make Patient Comfortable
13. Complete charting
14. Take of equipmes $\frac{1}{t}$
$7 \Rightarrow$ Biophysiological method:
It involve the Collection of biophysiological data form subject by using sparcialised equipment to determine the Physical and biological
105: Statues of subject: Such as Bp mearlomont by using spacial equipment such as sphagromanometen and stehoscipe.
$\Rightarrow$ Purpose of Biophysiological method:

1. To study basic Physiological pRocess.
2. To study Phyiôloyiod outcomes of nosy.
3. To evaluate nog. intervention:.
4. To study relation blu Physiological function -ming with health Problem.
$\Rightarrow$ Types:
5. In vivobiophysiological method:

Perform directly through major Process occuring intonalf with in living organism. through medick and suryich Jinstsoment.
Ex. TPIz, BAp.
II. Sn nitro biaphysislogical method..

Physiological
Process are measured os analyst te cone outside the organism.
Ex. Blood test, urine Lest, semen test et
8. $\Rightarrow$ Projective technique :-

These are method for Physiological attributes (Value, attitude Personality) by Providing respondent with ionstructuo stimuli to which they reply.
$\Rightarrow$ Types:

1. Association technique: (Word association technique)

This technique recquire the subject to respond at the Persentation of Stimulus (word) with the first think that come to the mind.

Ex. If the researcher say cold the responded may say Weather is (cold.
ii. Completion technique:

Completion Projective tectinique Provide: the subject. With stimulus that is concomplete and the subject is recquired to Complete it as he and she wishes.
A. Sentence completion:
the Subject is needed to Complete ar sentace this technique Permits (testing) not only own word but of ideas so that help in developing hypothesis.
Ex. Working with other all the time is goon.
3. Story Completion test:

The resecirches makes stories from uncomplet sentence- and as 12 the informates to Complet them:
iii. Construction technique:

In this technique the focaus on the Product. the subject is Require to Produce or Construct Something.
direction usevally a Pictures.
A. TAT test:
(Thematic apperception test)
TAT Consist of $a$ set of Pictures of $a$ normal everyday events the respondent are

- ask to describe What the tHink the Pictures repersent.
B. Rosenzweig test:

This test was a carton: formate where in we have ac series of Cartons With no words and the respondend are ask to Pit: there Own Wards.
iv. Choice ordering: technique useually use in quantitative Research but it is also use inqualitative research if the bespondent or subject have to explain by certain things are most impostit or least important as to rank os to order or cotageries.
v. Expressive technique:

A subject is ask to
Sole, act draw a spacific concept as situation the Expressive technique focus on manner in which the subject construct something, ratites, then is what it repersen
9. Q-sharts:

The history of $Q$-shorting in
relatively nev. It was deng loped research relatively nee. It was den loped in 1930 by british Psychologist william stephsom the idea behind the development of this method was inquire int the subiectind of human mind.

Q-shorit are Powerful tool in which the Participants are Persented with card arrangement. In this technique Participate (wows are recquire Prewrittem Card with Voice, Phrase and statement and ask to arrange this card in order to along with bipolar dimension.
10. vignettes:

Vignettes Rovide a valuable technique for exploring People Perception, belief and meaning
about the epacific situation. this method cool spacial used for Sensetive are of inquary that may not be completed by other method

In qualitative research vigenetts enables Porticip ants to define the situation in there own term. the fiestion ask to respond est are either open ended. (How do you describe the quality of life of the cones Patient (Rate tho quality of life of Cancer Patient.
$\Rightarrow$ Definition:
The vigenettes technique is a method that Can elicit/ gain Perception, opemion, belief, attitute From respence os Comment to stories deplicting. smario \& situation.

