## Topic:- PHD_HS_T1

1) Projective techniques are research instruments that
i. Reveal hidden aspects of personality
ii. Provide unstructured and ambiguous stimuli
iii. Have high objectivity
iv. Used for studying emotions and motivations

CODES: [Question ID = 2161]

1. i, ii, iii [Option ID $=8643$ ]
2. i, ii, iv [Option ID $=8644$ ]
3. i, iii, iv [Option ID $=8641$ ]
4. ii, iii, iv [Option ID = 8642]

## Correct Answer :-

- i, iii, iv [Option ID = 8641]

2) Three sources that a scholar researching extent of illiteracy in rural India may use to collect secondary data about the topic
i. Books on status of women
ii. Interview leaders
iii. Gender studies journals
iv. Government reports

CODES: [Question ID = 2152]

1. i, iii,iii [Option ID = 8605]
2. i, ii, iv [Option ID $=8607$ ]
3. ii, iii,iv [Option ID $=8606$ ]
4. i, iii, iv [Option ID = 8608]

## Correct Answer :-

- i, i, iiii [Option ID = 8605]

3) An increase in alpha, the level of significance, causes
[Question ID $=2137$ ]
1. An increase in the probability of the type I error to occur [Option ID $=8545$ ]
2. A decrease in the probability of type I error to occur [Option ID $=8546$ ]
3. No change in any of the type I or type II error [Option ID $=8547$ ]
4. None of these [Option ID $=8548$ ]

- An increase in the probability of the type I error to occur [Option ID $=8545$ ]

4) The chi-square tests can be applied to which of the following problems?
i. To determine if there is preferential selection of a telecom network by customers amongst the four widely popular networks in a population.
ii. To determine whether a gambler's die is loaded.
iii. To determine if students are only making guesses in attempting a 50 -question multiple choice test.
iv. To determine the best vitamin D supplement amongst the 3 available types by determining the increase in the vitamin $D$ level amongst 60 test $p$

CODES: [Question ID = 2157]

1. i, ii, iii [Option ID $=8627$ ]
2. i, ii, iv [Option ID $=8625$ ]
3. i, iii, iv [Option ID $=8628$ ]
4. ii, iii, iv [Option ID = 8626]

Correct Answer :-

- i, ii, iv [Option ID = 8625]

5) Test-retest method is used for ascertaining which property of a research instrument?
[Question ID = 2145]
1. Centrality [Option ID $=8580$ ]
2. Modality [Option ID $=8579$ ]
3. Reliability [Option ID $=8578$ ]
4. Variance [Option ID $=8577$ ]

Correct Answer :-

- Variance [Option ID $=8577$ ]

6) . Assertion (A): Increase in the sample size reduces the sampling error.

Reasoning ( $R$ ):The more information you have about the area of study, the more accurate are your results. [Question ID = 2167]

1. Both $(A)$ and $(R)$ are not true [Option ID $=8665$ ]
2. Both $(A)$ and $(R)$ are true [Option ID $=8666]$
3. (A) is false but (R) is true. [Option ID = 8668]
4. (A) is true, but $(R)$ is false. [Option ID = 8667]

## Correct Answer :-

- Both (A) and (R) are not true [Option ID = 8665]

7) A set of two dependent samples of size 15 each was taken and a t test was performed. What should be the degrees of freedom used for statistica t-test. [Question ID = 2139]
1. 14 and 28 respectively [Option ID $=8553$ ]
2. 15 and 30 respectively [Option ID $=8554$ ]
3. 14 in both cases [Option ID $=8556$ ]
4. 29 in both cases [Option ID $=8555$ ]
8) In absence of sampling frame which method of sampling can be used [Question ID = 2138]
1. Non probability [Option ID $=8551$ ]
2. Stratified [Option ID $=8552$ ]
3. Probability [Option ID $=8549$ ]
4. Random [Option ID $=8550$ ]

## Correct Answer :-

- Probability [Option ID = 8549]

9) Quasi- experimental designs do not involve [Question ID $=2146$ ]
1. Interrupted time series [Option ID $=8584$ ]
2. Randomization [Option ID $=8581$ ]
3. Manipulation [Option ID $=8583$ ]
4. Control Groups [Option ID = 8582]

Correct Answer :-

- Randomization [Option ID = 8581]

10) Assertion (A): Mann-Whitney $U$ test is the non-parametric alternative test to the independent sample $t$-test.

Reasoning ( $R$ ): Mann-Whitney $U$ test is used when the data is ordinal and assumptions of the $t$-test are not met. [Question ID = 2165]

1. Both $(A)$ and $(R)$ are incorrect. [Option ID $=8658$ ]
2. Both $(A)$ and $(R)$ are correct. [Option ID $=8657$ ]
3. (A) is incorrect, but (R) is correct [Option ID $=8660$ ]
4. (A) is correct, but ( $R$ ) is incorrect. [Option ID = 8659]

## Correct Answer :-

- Both $(A)$ and $(R)$ are correct. [Option ID $=8657$ ]

11) Assertion (A): Analysis of narratives involves Pre Coding

Reasoning (R): Coding qualitative data includes labeling concepts, defining and developing categories based on their properties and dimensions. [Q

1. Both $(A)$ and $(R)$ are incorrect. [Option $I D=8674$ ]
2. Both $(A)$ and $(R)$ are correct. [Option ID $=8673$ ]
3. (A) is incorrect, but $(R)$ is correct [Option ID $=8676$ ]
4. (A) is correct, but $(R)$ is incorrect. [Option ID $=8675$ ]

Correct Answer :-

- Both $(A)$ and $(R)$ are correct. [Option ID $=8673$ ]

12) Assertion (A): Using multiple sources of data or multiple approaches to analyse data enhances the credibility of a research study. Reasoning ( R ):Triangulation typically involves examining data from interviews, focus groups, written archives, or other sources. [Question ID = $\mathbf{2 1}$
1. Both $(A)$ and $(R)$ are incorrect. [Option ID $=8662$ ]
2. Both $(A)$ and $(R)$ are correct. [Option ID $=8661$ ]

Correct Answer :-

- Both $(A)$ and $(R)$ are correct. [Option ID $=8661$ ]

13) A researcher asks four groups of 10 children from 3 different villages about reasons they are not allowed to go to school. Each group discusses this? [Question ID = 2140]
1. Focus group discussion [Option ID $=8558$ ]
2. Structured interviews [Option ID $=8559$ ]
3. Participant observation [Option ID $=8560$ ]
4. Experiment [Option ID $=8557$ ]

Correct Answer :-

- Experiment [Option ID $=8557]$

14) A researcher measures a variable whose distribution she observes to be normally distributed. On this basis which of the following statements
i. The distribution's mean will be greater than its median
ii. The distribution's mean will be similar to its median
ii. The distribution's mean will be less than its mode
iv. The distribution's mean will be similar to its mode

CODES: [Question ID = 2158]

1. ii, iii [Option ID $=8631$ ]
2. i, iv [Option ID $=8629$ ]
3. i, iv [Option ID $=8632$ ]
4. ii, iv [Option ID $=8630$ ]

Correct Answer :-

- i, iv [Option ID = 8629]

15) Aspects that may affect the internal validity of a research design are:
i. History
ii. Crossing
iii. Statistical regression
iv. Maturation
v. Testing Effects

CODES: [Question ID = 2164]

1. i, ii, iii, v [Option ID = 8654]
2. i, ii, iv, v [Option ID $=8655$ ]
3. i, iii, iv, v [Option ID $=8656$ ]
4. ii, iii, iv, v [Option ID = 8653]

Correct Answer :-

- ii, iii, iv, v [Option ID $=8653]$

1. Confounding variable [Option ID $=8534$ ]
2. Consistent variable [Option ID $=8535$ ]
3. Congruent variable [Option ID $=8533$ ]
4. Concurrent variable [Option ID $=8536$ ]

## Correct Answer :-

- Congruent variable [Option ID $=8533$ ]

17) What is positivism? [Question ID = 2149]
1. Knowledge about the nature of our being in the world as revealed through theoretical philosophizing [Option ID $=8594$ ]
2. Knowledge is grounded in religion [Option ID $=8596$ ]
3. Statistics and statistical analysis [Option ID $=8595$ ]
4. A philosophical position on how we go about obtaining knowledge [Option ID = 8593]

## Correct Answer :-

- A philosophical position on how we go about obtaining knowledge [Option ID = 8593]

18) What is the chance of throwing head or tail alternately in 3 successive tossing of a coin? [Question ID = 2147]
1. $1 / 4$ [Option ID $=8586]$
2. $1 / 8$ [Option ID $=8585$ ]
3. $1 / 2$ [Option ID $=8587]$
4. $1 / 6[$ Option ID $=8588]$

Correct Answer :-

- $1 / 8$ [Option ID $=8585$ ]

19) What is the function of a contingency table, in the context of bivariate analysis? [Question ID = 2143]
1. It lists the different levels of $p$ value for tests of significance. [Option $I D=8571$ ]
2. It summarizes the frequencies of two variables so that they can be compared. [Option ID $=8570$ ]
3. It shows the results you would expect to find by chance. [Option ID = 8569]
4. It compares the results you might get from various statistical tests [Option ID $=8572$ ]

## Correct Answer :-

- It shows the results you would expect to find by chance. [Option ID $=8569$ ]

20) Rating your experience while eating out at a restaurant is an example of a [Question ID = 2144]
1. Projective technique [Option ID $=8574$ ]
2. Likert scale [Option ID = 8573]
3. Observation technique [Option ID $=8575$ ]
4. Sentence completion [Option ID $=8576$ ]

Correct Answer :-

- Likert scale [Option ID = 8573]

21) In a population of 1000,280 students scored 60 out of 100 . What is the relative frequency? [Question ID $=2148$ ]
2. 28 [Option ID $=8589]$
3. 0.028 [Option ID $=8592$ ]
4. 2.8 [Option ID $=8590]$

Correct Answer :-

- 28 [Option ID $=8589$ ]

22) Probability sampling techniques include:
i. Systematic random sampling
ii. Quota sampling
iii. Stratified random sampling
iv. Cluster sampling

CODES: [Question ID = 2155]

1. i, ii, iii [Option ID $=8618$ ]
2. i, ii, iv [Option ID $=8620$ ]
3. i, iii, iv [Option ID $=8617$ ]
4. ii, iii, iv [Option ID = 8619]

## Correct Answer :-

- i, iii, iv [Option ID = 8617]

23) The arithmetic mean of a group of 100 items is 50 and of another group of 150 items is 100 . What will be the mean of all the items together? [
1. 80 [Option ID $=8566$ ]
2. 100 [Option ID $=8568$ ]
3. 75 [Option ID $=8565$ ]
4. 125 [Option ID $=8567$ ]

Correct Answer :-

- 75 [Option ID $=8565$ ]

24) In external validity
[Question ID = 2141]
1. Quantitative and qualitative methods are to be used. [Option ID $=8562$ ]
2. There is no deliberate attempt to either conceal or highlight something. [Option ID =8561]
3. The solution to the research problem is known in advance [Option ID $=8564$ ]
4. The conclusions from a research study can be generalized [Option $\mathrm{ID}=8563$ ]

## Correct Answer :-

- There is no deliberate attempt to either conceal or highlight something. [Option ID $=8561$ ]

25) What type of coding would a multiple choice question produce? [Question ID = 2150]
1. Pre-coded [Option ID $=8598$ ]
2. Coding emerging from the data [Option ID $=8600$ ]

Correct Answer :-

- Qualitative coding [Option ID = 8597]

26) The correlation between the mathematics and Science marks of grade $10^{\text {th }}$ students is +0.83 . What cannot be concluded from this?
i. Generally speaking, higher the marks in mathematics, higher are the marks in science.
ii. Since a student is better in mathematics, likes science and scores well in it too.
iii. A student has to study science well to score good marks in mathematics.
iv. The marks in science were $83 \%$ of the marks in mathematics.

CODES: [Question ID = 2160]

1. i, ii, iii [Option ID = 8638]
2. i, ii, iv [Option ID $=8637$ ]
3. i, iii, iv [Option ID $=8640$ ]
4. ii, iii, iv [Option ID = 8639]

Correct Answer :-

- i, ii, iv [Option ID = 8637]

27) Match the concepts in list A with descriptions in List B

List A
a) Testing a hypothesis
b) Analysis of relationship of two variables
c) Discern hidden emotions
d) Cohort studies

## List B

i. Bivariate analysis
ii. Inferential statistics
iii. Longitudinal studies
iv. Projective tests
v. Deductive reasoning

## Codes:

[Question ID = 2175]

1. (a)iii (b)i (c)v (d)iv [Option ID $=8697]$
2. (a)iv (b)i (c)ii (d)v [Option ID = 8699]
3. (a)ii (b)i (c)iv (d)iii [Option ID $=8700$ ]
4. (a)ii (b)i (c)iii (d)iv [Option ID = 8698]

Correct Answer :-

- (a) iii (b)i (c)v (d)iv [Option ID = 8697]

28) Match the concepts in list A with descriptions in List B

List A
a) In-depth analysis of a person, group, or phenomenon i.. Laboratory experiment
c) Studies carried out in the course of an activity
d) Research conducted for many years
iii. Action research
iv. Longitudinal studies
v. Historical research

Codes:
[Question ID = 2174]

1. (a)iii (b)i (c)v (d)iv [Option ID = 8693]
2. (a)iv (b)i (c)ii (d)v [Option ID = 8695]
3. (a)ii (b)i (c)v (d)iii [Option ID $=8696]$
4. (a)ii (b)i (c)iii (d)iv [Option ID = 8694]

Correct Answer :-

- (a)iii (b)i (c)v (d)iv [Option ID = 8693]

29) Match the statistical tests in List $A$ to their features in List $B$

List A
List B
a) Sign test
b) Pie Chart
c) Chi square
d) Pearsons ir
i. Comparing two large random samples
ii. Data in frequencies
iii. Difference between two dependent groups when data in ordinal scale of measurement
iv. Association between two variables
v. Nominal category data

## Codes:

[Question ID = 2172]

1. (a)iii (b)ii (c)iv (d)v [Option ID = 8687]
2. (a)i (b)ii (c)iv (d)iii [Option ID = 8688]
3. (a)iii (b)v (c)ii (d)iv [Option ID $=8685$ ]
4. (a)ii (b)i (c)iv (d)v [Option ID = 8686]

## Correct Answer :-

- (a)iii (b)v (c)ii (d)iv [Option ID = 8685]

30) Match the items given in list $A$ with the appropriate scale of measurement in list $B$

## List A

## List B

a) Weight ( Kg )
i. Interval scale
b) Breeds of Dogs
ii. Ratio Scale
c) Temperature in ${ }^{\circ} \mathrm{C}$
iii. Ordinal scale
d) Customer feedback on quality of service ( Excellent to poor) iv. Nominal scale v. Categorical scale

1. (a)ii (b)iv (c)iii (d)i [Option ID $=8690]$
2. (a)ii (b)iv (c)i (d)iii [Option ID $=8692$ ]
3. (a)iv (b)ii (c)i (d)iii [Option ID = 8689]
4. (a)iv (b)i (c)ii (d)iii [Option ID = 8691]

Correct Answer :-

- (a)iv (b)ii (c)i (d)iii [Option ID $=8689$ ]

31) Match the items given in list $A$ with the items in list $B$

## List A

a. Analysis of the principles or procedure of inquiry
b. A section or table of subsidiary matter at the end of a document.
c. Related research work as fundamental to any study.
d. A list of the books and articles referred to in a scholarly work

Codes:
[Question ID = 2176]

1. (a)ii (b)iv (c)i (d)iii [Option ID = 8702]
2. (a)iii (b)iv (c)ii (d)i [Option ID $=8701$ ]
3. (a)iii (b)iv (c)i (d)ii [Option ID = 8703]
4. (a)ii (b)iii (c)ii (d)i [Option ID = 8704]

Correct Answer :-

- (a)iii (b)iv (c)ii (d)i [Option ID = 8701]

32) Match the items given in list $A$ with the items in list $B$

## List A

List B
a) The middle point in a distribution dividing the group in two equal parts i Positively skewed
b) The score that occurs most frequently in a distribution. ii Median
c) Sum of the numerical values of each and every observation divided by
the total number of observations
iii Mean
d) Curve stretched towards the right

Codes:
[Question ID = 2171]

1. (a)ii (b)iv (c)iii (d)i [Option ID = 8684]
2. (a)ii (b)iv (c)i (d)iii [Option ID $=8682$ ]
3. (a)iii (b)ii (c)iv (d)i [Option ID $=8681]$
4. (a)iv (b)i (c)iii (d)ii [Option ID = 8683]

Correct Answer :-

- (a)iii (b)ii (c)iv (d)i [Option ID = 8681]

33) If the following two curves represent the distribution of scores for a group of students on two tests, which test appears to be more difficult for the students, A or B

[Question ID = 2132]
1. Cannot determine with the given information [Option ID $=8528$ ]
2. $B$ [Option ID $=8526]$
3. A [Option ID $=8525$ ]
4. They have the same level of difficulty [Option ID $=8527$ ]

Correct Answer :-

- A [Option ID $=8525$ ]

34) Amongst the following which would be the suitable choices for graphically representing the exports of silk from India in terms of million US dol
i. Bar graphs
ii. Histogram
iii. Line graph
iv. Scatter chart

CODES
[Question ID $=2156]$

1. i, ii, iii [Option ID = 8621]
2. i, iii,iv [Option ID $=8623$ ]
3. i, ii,iv [Option ID $=8622$ ]
4. ii, iii, iv [Option ID $=8624$ ]

Correct Answer :-

- i, ii,iii [Option ID = 8621]

35) The range of a data set cannot be calculated when the distribution, [Question ID = 2133]
1. Is a bimodal distribution [Option ID $=8530$ ]
2. Is open ended [Option ID $=8531$ ]
3. Has presence of outliers [Option ID $=8529$ ]
4. The range can always be calculated [Option ID $=8532$ ]
36) If someone steps on a bathroom scale 10 times and gets readings 75 Kgs each time, then the weighing scale can be said to have [Question ID
1. Regularity [Option ID = 8601]
2. Consistency [Option ID = 8603]
3. Validity [Option ID $=8602$ ]
4. Reliability [Option ID $=8604$ ]

Correct Answer :-

- Regularity [Option ID $=8601$ ]

37) Operational definitions in a research study:
i. Reduce subjective bias
ii. Facilitate measurement
iii. Minimize ambiguity
iv. Permit inferential statistic use
v. May vary from one study to the other

CODES: [Question ID = 2163]

1. i, ii, iii, iv [Option ID $=8652$ ]
2. i, ii, iii, v [Option $I D=8650$ ]
3. i, ii, iv, v [Option ID $=8651$ ]
4. ii, iii, iv, v [Option ID = 8649]

## Correct Answer :-

- ii, iii, iv, v [Option ID = 8649]

38) Which of the following are comparative scaling techniques?
i. Paired Comparison
ii. Bogardus Social Distance Scale
iii. Constant Sum
iv. Graphic Rating
v. Q Sort

CODES: [Question ID = 2162]

1. i, ii, iii, v [Option ID $=8646$ ]
2. i, ii, iii, iv [Option ID $=8645$ ]
3. i, iii, iv, v [Option ID $=8647$ ]
4. ii, iii, iv, v [Option ID = 8648]

Correct Answer :-

- i, ii, iii, iv [Option ID = 8645]

39) Assertion (A): Obtaining participants from NGO referrals gives a random sample for any study.

Reasoning (R): Most NGO's have participants that represent the universe under study.

1. Both $(A)$ and $(R)$ are correct. [Option $I D=8677]$
2. Both $(A)$ and $(R)$ are incorrect. [Option ID $=8678$ ]
3. $(A)$ is incorrect, but $(R)$ is correct. [Option ID $=8680$ ]
4. (A) is correct, but $(R)$ is incorrect. [Option ID $=8679$ ]

## Correct Answer :-

- Both (A) and (R) are correct. [Option ID = 8677]

40) Assertion (A):The statement being tested in a test of statistical significance is called the null hypothesis

Reasoning (R):Usually, the null hypothesis is a statement of 'no effect' or 'no difference'.
[Question ID $=2168$ ]

1. Both $A$ and $R$ are true. [Option ID $=8669$ ]
2. Both $A$ and $R$ are not true. [Option ID $=8670$ ]
3. $A$ is false but $R$ is true [Option $I D=8672$ ]
4. A is true but R is false. [Option $\mathrm{ID}=8671$ ]

## Correct Answer :-

- Both A and R are true. [Option ID = 8669]

41) When might it be appropriate to conduct an analysis of variance (ANOVA) test?

The variance of several population is not same
There is homogeneity of variance among populations
The means of three or more population has to be compared
The median of two or more population has to be compared
CODES: [Question ID = 2159]

1. ii , iif [Option ID = 8635]
2. i , iv [Option ID $=8634$ ]
3. ii , iv [Option ID = 8636]
4. i , iii [Option ID $=8633$ ]

Correct Answer :-

- i , iii [Option ID = 8633]

42) According to Kerlinger, the rules guiding categorization of raw data are
i. Regressive multiple discourse
ii. Exhaustiveness
iii. Mutually exclusive \& independent
iv. Singular classificatory principle

CODES: [Question ID = 2154]

1. i, iii, iii [Option ID $=8616]$
2. i, ii, iv [Option ID $=8615$ ]
3. iii,iii,iv [Option ID = 8613]

## Correct Answer:-

- ii,iii,iv [Option ID = 8613]

43) A measure that describes the shape of a distribution's tails in relation to its overall shape. [Question ID = 2135]
1. Variance [Option ID $=8540$ ]
2. Kurtosis [Option ID $=8539$ ]
3. Deviation [Option ID = 8537]
4. Skewness [Option ID $=8538$ ]

## Correct Answer:-

- Deviation [Option ID = 8537]

44) In participatory researches the selection of methods and tools is done with the objective of
i. Strengthening of the dominant groups perspectives
ii. Participants have an active role in the research process
iii. Involving marginalized community groups meaningfully
iv. Continuous cycle of reflection and action

CODES: [Question ID = 2153]

1. i,ii, iv [Option ID = 8610]
2. i, ii, iii [Option ID = 8611]
3. ii,iii,iv [Option ID = 8609]
4. i, iii, iv [Option ID = 8612]

## Correct Answer :-

- iii,iii,iv [Option ID = 8609]

45) Assume that a chi square test is to be performed on a contingency table with three rows and four columns. How many degrees of freedom shou
1. 6 [Option ID $=8544]$
2. 9 [Option ID $=8543$ ]
3. 8 [Option ID $=8542$ ]
4. 16 [Option ID $=8541$ ]

## Correct Answer :-

- 16 [Option ID $=8541$ ]

Topic:- PHD_HS_T2
1)

On the basis of the illustration below answer


Approximate \% age of students whose favourite activity is to chat online.
[Question ID = 13617]

1. $18 \%$ [Option ID $=24466$ ]
2. $50 \%$ [Option ID $=24467]$
3. $66 \%$ [Option ID $=24465$ ]
4. Cannot find out with the given information. [Option ID $=24468$ ]

Correct Answer :-

- $66 \%$ [Option ID $=24465$ ]

2) 

On the basis of the illustration below answer


The above graphical representation is a [Question ID = 13616]

1. Flow Chart [Option ID $=24464$ ]
2. Bar Graph [Option ID $=24461$ ]
3. Pie Chart [Option ID $=24463$ ]
4. Histogram [Option ID $=24462$ ]

Correct Answer :-

- Bar Graph [Option ID = 24461]

3) 

On the basis of the illustration below answer


The above data can be statistically interpreted to infer about the population of all school going children in the above age group using the following s

1. Independent t-test [Option ID $=24474$ ]
2. Sign test [Option ID $=24476$ ]
3. ANOVA [Option ID $=24473$ ]
4. Chi square [Option ID $=24475$ ]

Correct Answer :-

- ANOVA [Option ID = 24473]

4) 

On the basis of the illustration below answer


Which other graphical representation can be used to plot the given data? [Question ID = 13620]

1. Histogram [Option ID $=24478$ ]
2. Frequency polygon [Option ID $=24479$ ]
3. Pie chart [Option ID $=24477$ ]
4. All of the above [Option ID $=24480$ ]

Correct Answer :-

- Pie chart [Option ID = 24477]

5) 

On the basis of the illustration below answer


Which is the activity least preferred by students. [Question ID = 13618]

1. Cannot find out with the given information. [Option ID $=24472$ ]
2. Earn money [Option ID $=24471$ ]
3. School clubs [Option ID $=24470$ ]
4. Visit with friends [Option ID $=24469$ ]

Correct Answer :-

- Visit with friends [Option ID = 24469]

