

**PG. DIPLOMA IN RURAL BANKING
(PGDRBI)**

00063

Term-End Examination

December, 2011

**MCQ-033 : RURAL RESEARCH METHODS AND
QUANTITATIVE TECHNIQUES**

Time : 3 hours

Maximum Marks : 70

1. Fill in the blanks/ indicate True or False : 25
- (a) Statistics is an art and science of collection, _____ and presentation of data.
 - (b) A _____ is a portion of the population selected for analysis
 - (c) An _____ is the value of a variable for an element.
 - (d) A _____ variable can assume any numerical value over a certain interval.
 - (e) A set of data is said to be _____ if the values/ observations belonging to it can be ranked (put in order) or have a rating scale attached.
 - (f) Frequency Polygon can be drawn with or without a histogram. (True/False)

- (g) A diagrammatic representation called _____ represents the frequency of data as pictures or symbols.
- (h) A _____ is prepared and mailed to respondents to respond in specified time. (questionnaire/Schedule)
- (i) Band Graph is used to represent _____. (Time series/ frequency distribution).
- (j) Geometric mean of rate of growth : 34, 27, 45, 55, 22, 34, comes to _____.
- (k) Formula to calculate Harmonic mean of 'grouped data' _____
- (l) 'Skewness' indicate the _____ in data (shape/Variation)
- (m) Events which consist of more than one outcome are called _____ events.
- (n) Whatever, we are expecting from the sample data is taken as the (Null/ Descriptive/ Alternative Hypotheses).
- (o) The term "regression" was introduced by _____.
- (p) Village Resource Map is a tool to learn _____ perception about natural resources and their use.
- (q) PRA Team should also attempt Transact Walk in a secret manner to better understand and verify the resource information given by the villagers (True/False)

- (r) A Watershed has a definite _____ line
- (s) PRA Team goes to a village for _____ rural process rather than _____ villagers about different ways of rural development.
- (t) PRA is an evolved version of PRA
- (u) Participatory Rural Appraisal _____ the community to understand, analyse and takes its own decision.
- (v) The Millennium Declaration commits the international community and members states of the UN to the achievement of _____ major goals to be achieved by the year _____. A list of 18 targets and _____ indicators have been agreed upon to ensure comparability across countries.
- (w) Dispersion is "The measure of the extent to which the individual items vary" has been defined by _____.
- (x) "Coefficient of variation is the percentage variation in mean, Standard Deviation being considered as the total variation in the mean" has been defined by _____.
- (y) For asymmetrical bell shaped distribution, 95% of the observations lie in the range of 'mean \pm _____'.

2. Differentiate between : 4
- (a) Parameter and Statistics
 - (b) Null and Alternative Hypotheses
 - (c) Nominal and ordinal data
 - (d) Descriptive and Inferential statistics
3. Prepare suitable frequency distribution, less than Ogive and More than Ogive : 2+1+1
- 42, 74, 40, 60, 82, 115, 41, 61, 75, 83, 63, 53, 110, 76, 84, 50, 67, 65, 78, 77, 56, 95, 68, 69, 104, 80, 79, 79, 54, 73, 59, 81, 100.
4. Differentiate between : 5
- (a) Multi-stage sampling and Multi-phase sampling
 - (b) Cluster sampling and Stratified Sampling.
5. "Outsiders working with Insiders" is a basic principle followed in PRA and RRA. Compare RRA and PRA. 5
6. Describe various PRA tools you would prefer to apply as a Rural Development Facilitator in a Watershed Development Project. Would you apply them at random or in a particular sequence ? If yes, Why ? 5

7. Draw representative outputs (diagrams only) for following PRA tools in a typical Indian rural perspective (any two from the following) : 6

- (a) Resource and Social Map of a village
- (b) Transect walk
- (c) Seasonal Health Calendar (monthly intervals)

8. Kalinga and Co. Ltd., Bhubaneswar is engaged in production of Mango Juice. It has been found that the production of mango juice is influenced by the price of mango in the market : 5

Year	1	2	3	4	5	6	7	8	9	10
Mango Juice Production (MT/Yr)	25	30	25	22	18	35	32	30	40	30
Price of Mango (Rs./kg)	10	8	11	12	10	7	7	10	8	12

Establish regression equation as Production of mango = f (Price of mango). Estimate the constant and regression coefficient using OLS.

9. Calculate the range and co-efficient of range of the following series. 3

Month	Electricity consumption (units)
1	35
2	39
3	42
4	48
5	53
6	58
7	64
8	70
9	75
10	85
11	96
12	110

10. Calculate the mean Deviation about mean and about median. 5

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	16	12	10	5	3	6

11. Write the criteria of a good research problem. 3