34 (2) RMBI 2·5

2016

RESEARCH METHODOLOGY AND BIOSTATISTICS

Paper : 2·5

Full Marks : 80

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : ***(any two)*** 2×10=20

   (i) What is Sampling ? What points should be taken into consideration by a researcher in developing a sample design for the research project ?

   OR

   What is binomial distribution ? Write the characteristics of the distribution.

   (ii) Explain the 'Processing Operations' in detail.

Contd.

OR

A research worker want to prove that, there is no relationship between smoking and lung ailment. To investigate that, the researcher collect the sample of 300 males in the age group of 40 and 50 who are given medical test. The observed data are as follows :

	LUNG AILMENT	NON-LUNG AILMENT	TOTAL
SMOKERS	75	105	180
NON-SMOKERS	25	95	120
TOTAL	100	200	300

On the basis of the above data, can it be concluded that smoking and lung ailments are independent ?

(iii) What is Hypothesis ? What are the characteristics of a hypothesis ? How would you measure the power of a hypothesis test ?

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3. Answer in short : 10×2=20

(i) What is Histogram ?

(ii) What is Ordinal Scale ?

(iii) What is 't' test ?

(iv) What is one-tailed test ?

(v) What is degrees of freedom ?

(vi) What is parameter ?

(vii) What is skewness ?

(viii) What is Sampling Frame ?

(ix) Mention the characteristic of a good sample design.

(x) What is variable ?