

2015
PAPER : 2.5
RESEARCH METHODOLOGY AND
BIostatISTICS

Full Marks: 80

Time: 3 Hours

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

- 1 Answer the following questions : (any two) 2×10=20
- a) What is research? Discuss the problems encountered by researcher in India.
- b) What is sampling? What are the different types of sample design? Discuss the different types of non-probability sampling.

Or

What is normal distribution? How does it diverges from normality?

- c) Does the data provided below indicate any association between literacy and still birth?

Educational status of Methods

Birth	Illiterate	Primary School	Middle School	High School	University	Total
Live birth	12	125	97	92	18	344
Still births	2	21	5	6	1	35
Total	14	146	102	98	19	379

or

Chest circumference in cm of 10 normal children and 10 malnourished children aged one year are given below:

Normal group :	42	46	50	48	50	52	41	49	51	56
Malnourished Group:	38	41	36	35	30	42	31	29	31	35

Test for the statistical significance of the difference in chest circumference, on an average between these two group.

P.T.O.

(2)

- 2 Answer the following questions : (any eight) 8×5=40
- i) Bring out the difference between questionnaire and schedule.
 - ii) What is Research Methods? How does it differ from research methodology?
 - iii) Discuss the basic principles of research design.
 - iv) What is central tendency of scores?
 - v) Discuss any two scales of measurement.
 - vi) Describe the different types of analysis.
 - vii) How do you measure the power of hypothesis test?
 - viii) How would you apply computer in research?
 - ix) Draw a frequency Polygon out of the following scores/data.

Scores	Frequency
70-75	6
76-80	18
81-85	46
86-90	17
91-95	6
96-100	2
	N=95

- x) What are basic assumptions underlying ANOVA?

- 3 Answer in short : 10×2=20
- i) What is 'Z' test?
 - ii) What is Mean?
 - iii) What is one-tailed test?
 - iv) What is Type I error?
 - v) What is inferential statistics?
 - vi) What is test of significance?
 - vii) What is Degrees of Freedom?
 - viii) What is 'Editing' in processing operations?
 - ix) What is Rating scale?
 - x) What is Research Problem?

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