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Master of Physiotherapy (M.P.T.)

1st YEAR EXAMINATION, 2011-12

RESEARCH METHODOLOGY & BIOSTATISTICS

Time : 3 Hours]

[Max. Marks : 100

Note: Attempt any Five questions. At least Two questions are compulsory from each section.

Section A (Research Methodology)

1. What are epidemiological study designs? Explain with [20 examples.
2. Define Research and its application. What are the [20 basic characteristics of the research?
3. Write short notes on: [20
 - (a) Probability
 - (b) Randomization
 - (c) Placebo Design
 - (d) Ethical issue in research
4. Define the graphical representation of data. State [20 which types of diagrams are used for presentation of qualitative and quantitative data?
5. What are the essential steps in planning a research [20 proposal?

Section B (Biostatistics & Computer Application)

6. (a) Define and explain the term Correlation and [10 Regression. Describe the limits of Correlation coefficients.
- (b) Find the correlation coefficient for the following data:

X:	3	1	0	5	2
Y:	0	9	1	2	8

7. Explain any *four* of the following: [20]
- Level of significance
 - Small and Large sample test
 - Range
 - Chi-square (χ^2) Test
 - Type I and Type II error
 - Normal Distribution
8. (a) Define Computer. Write the characteristics of a [10]
computer system.
- (b) Describe the uses of MS-Word and MS-Excel. [10]
9. Define Karl Pearson Coefficient of correlation. The age [20]
in years of ten young couples is given below:

Husband (X)	21	25	26	24	22	30	19	24	28	32
Wife (Y)	19	20	24	21	21	24	18	22	25	30

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