[LH 0415] **OCTOBER 2015** **Sub. Code: 1306**

M.Sc., CLINICAL NUTRITION
(from 2012-2014 onwards)
FIRST YEAR
PAPER VI – RESEARCH METHODS AND BIOSTATISTICS

Q.P. Code : 281306

Time : Three hours **Maximum : 100 marks**

I. Elaborate on : (2 x 20 = 40)

1. Explain the steps involved in testing of hypothesis?

2. A group of 5 patients treated with medicine 'A' weigh 42, 39, 48, 60 and 41 kgs: Second group of 7 patients from the same hospital treated with medicine ' B' weigh 38, 42 , 56, 64, 68, 69 and 62 kgs. Do you agree with the claim that medicine ' B' increases the weight significantly?.The critical value of t with 10 degrees of freedom is 1.812 at 5% level of significance.

II. Write notes on: (10 x 6 = 60)

1. Sampling.
2. Power of a test.
3. Characteristics of Observation method.
4. Review of literature.
5. Analysis Of Variance.
6. Research Protocol writing.
7. Ethical issues in human research.
8. Features of SPSS.
9. An antidiabetic drug was tested in diabetic patients. The fasting blood sugar values (mg%) before and after the drug are given for 6 patients. Analyze the data by using a suitable statistical test? (Ref Table value : 2.57)

Before :	120	122	134	128	131	125
After :	110	87	111	116	93	87

10. In an experiment to determine the effect of a certain drug on serum cholesterol level (Measured in mg/100 ml) in 30 year old males, The following range of data were recorded for the drug treated group? Calculate the Arithmetic mean and Standard Deviation?

Cholesterol level:	120-140	140-160	160-180	180-200	200-220	220-240
No of patients :	1	2	3	5	7	6

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