

[LI 2160]

APRIL 2016

Sub. Code: 2160

**M.D. (SIDHA) DEGREE EXAMINATION  
FIRST YEAR**

**BRANCH VI – NANJU NOOLUM MARUTHUVA NEETHI NOOLUM**

**PAPER V – BIO-STATISTICS**

*Q.P. Code : 322160*

**Time : Three Hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. BMI of 3 arms of randomly allotted treatment groups is as follows

Group I : 18 24 30 28 23 25 26 21 19 32  
19 29 32 34 29 27 25 20 20 22

Group II: 21 22 19 24 25 26 22 24 23 21  
22 20 22 21 20 24 28 23 21 20

Group III: 21 31 33 30 34 31 29 27 25 24  
20 22 18 19 20 25 24 23 26 27

- a) Explain the procedure for ANOVA.
  - b) Apply ANOVA test for the above data and draw inference about its homogeneity ( $F(2,57) = 5.02$  for 0.05 level of significance).
2. a) Elaborate on correlation and regression methods.  
b) Elaborate on use of chi-square test in clinical Research.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Application of Biostatistics.
2. Tabulation procedure.
3. Probability and its use in significance.
4. Coefficient of variation.
5. Sampling methods.
6. Different phases of clinical studies.
7. Vital Statistics and its indicators.
8. Life Table.
9. Role of IEC in clinical research.
10. Type – I and Type – II errors in testing of Hypothesis.

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