B. Pharm. (CBCS Pattern) Semester - VIII

BP801T - Biostatistics & Research Methodology

P. Pages : 2 **GUG/S/23/14147**

Time : Three Hours Max. Marks : 75

Notes : 1. All questions are compulsory.

1. Multiple Choice Questions. **20**

1) The median of the data 1, 4, 2, 5, 0 is --------
   a) 1 b) 2
   c) 4 d) 5

2) Which of the following is not a type of central tendency.
   a) Mean b) Mode
   c) Median d) None of these

3) Biostatistics is the application of statistics to a wide range of topics in ------
   a) Statistics b) Biology
   c) Both a & b d) None of these

4) Karl Pearson's coefficient of correlation is also known as --------- moment correlation.
   a) Product b) Result
   c) Both a & b d) None of these

5) The basic relationship between X and Y in regression is given by -------
   a) X = b + bX b) Y = b + bX
   c) X = a + X d) Y = a + bX

6) Correlation factor is -------
   a) T/2 b) T^2N
   c) T^2/n d) All of these

7) Full form of SEM is Standard --------
   a) Errata of Mean b) Error of Mean
   c) Errata of Median d) Error of Median

8) R-Square, also known as -------
   a) Mean Value b) Mode analysis coefficient
   c) Coefficient of determination d) None of These

9) Which among the following is not a type of research?
   a) Qualitative b) Empirical
   c) Analytical d) None of these

10) A histogram is an accurate representation of the distribution of -----
   a) Alphabetic data b) Numerical data
   c) Both a & b d) None of these

11) A cohort study is a particular form of ------- study that simple a cohort.
   a) Vertical b) Horizontal
   c) Circular d) Longitudinal

12) clinical trials involving new drugs are commonly classified into ------- phases.
a) One b) Two
c) Three d) Four

13) Blocking is a technique for dealing with ---------- nuisance variables.
a) Uncontrollable b) Unbearable
c) Bearable d) Controllable

14) Confounding is a design technique for arranging the complete factorial experiment in ---------
a) Row b) Blocks
c) Both a & b d) None of these

15) The file associated with mini tab graph is -------
a) *.mgf b) *.mpj
c) *.mtmm d) *.mt

16) Which among the following is not a use of regression modeling?
a) predictive Modeling b) Segmentation
c) Testing d) Analysis

17) Design of experiments in the design of any -----
a) Force b) Task
c) Moment d) All of these

18) Central composite designs are ------ level full factorial.
a) One b) Two
c) Three d) Four

19) Special geometrics is -------
a) Cube b) Sphere
c) Bot a & b d) None of these

20) Which among the following properties and features of response methodology?
a) Orthogonalogy b) Rotatability
c) Uniformity d) All of these

2. Long Answer Questions. (Solve **any two**) **20**
1) Define and discuss various techniques of ANOVA.
2) Discuss experiential design technique in detail.
3) Define and discuss blocking and confounding system.

3. Short answer questions. (solve **any seven**) **35**
1) Write a note on Minitab.
2) Explain experiment design.
3) Give core function of SSP.
4) Write a note on pie chart.
5) Explain cohort studies.
6) Define population and subpopulations in statistics.
7) Explain mathematical expression of SEM.
8) Note on measures of central tendency.
9) Explain Karl Pearson Coefficient of Correlation.

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