

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION DECEMBER 2018
(First Semester)

Branch - **CLINICAL NUTRITION AND DIETETICS**

BIOSTATISTICS & RESEARCH METHODS

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a Explain the criteria of Good Research.
OR
b Explain the objective and motivations of Research.
- 2 a Explain the various types of Report.
OR
b Determine the size of the sample for estimating the true weight of the cereal containers for the universe with $N=5000$ on the basis of the following information:
(i) the variance of weight = 4 ounces on the basis of past records
(ii) estimate should be within 0.8 ounces of the true average weight with 99% probability.
Will there be a change in the size of the sample if we assume infinite population in the given case? If so, explain by how much?
- 3 a Explain the uses of health statistics.
OR
b Describe the some indices in hospital statistics.
- 4 a Describe the important measures of dispersion.
OR
b What is Binomial distribution. Explain with suitable example.
- 5 a Explain the following:
(i) Testing goodness of fit in χ^2 .
(ii) Testing Independence of χ^2 .
OR
b Write the procedure of one way classification of ANOVA.

SECTION -B 145 Marks)

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 Distinguish between Research methods and Research Methodology.
- 7 Describe the different types of Sampling methods.
- 8 Explain the following with example.
(i) Mortality rate
(ii) Morbidity rate
(iii) Fertility rate.
- 9 Explain the following: