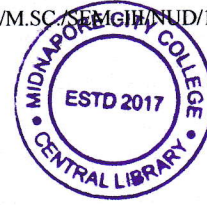Total pages: 02

PG (CBCS)
M.Sc. Semester- III Examination, 2023
NUTRITION AND DIETETICS
PAPER: NUD 301
(BIO-STATISTICS IN NUTRITION AND RESEARCH METHODOLOGY)
Full Marks: 40   **Time: 2 Hours**

The figures in the right-hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

<u>Write the answer for each unit in separate sheet</u>

UNIT: 25
BIO-STATISTICS IN NUTRITION

GROUP-A

Answer any **TWO** of the following questions: 2×2=4

1. Define 'Dispersion' statistics with its importance.
2. Differentiate between polygon and pie-diagram.
3. Which and how statistical measurement use in assessment of nutritional status?
4. State any two significance of Chi-square(x^2) test.

GROUP-B

Answer any **TWO** of the following questions: 2×4=8

1. How do you compute mean and standard deviation of ungroup data in a variable?
2. What are the merits and demerits of 'Pearson's correlation'?
3. Distinguish between Skewness and Kurtosis with computation formula.
4. Why ANOVA is more powerful than t-test? Classify with example of ANOVA.

GROUP-C

Answer any **ONE** of the following questions: 1×8=8

1. Write the relationship between one-tail and two-tail t-test.
   The Hb(g%) of 10 male college students and 10 female college students are given below.
   Find out whether or not the mean weight of male is significantly higher than that of female.   3+5

Male Hb(g%)	11.2	12.4	10.8	13.2	11.6	12.6	10.4	14.2	12.8	13.6
Female Hb(g%)	12.8	11.6	12.2	11.8	9.8	12.4	12.4	11.4	13.8	12.0

$t_{0.02(18)}=2.552$ $t_{0.05(18)}=2.101$

P.T.O

2. What are the importance's of chi-square test?   2+6

Find out whether or not significance association between smoker and cancer, when 30 are people suffering from cancer out of 100 smokers, whereas out of 60 non-smokers 10 are suffering from cancer with using the selected critical chi-square value as given below.

Critical $\chi^2_{0.02(3)} = 9.84$, $\chi^2_{0.02(2)} = 7.82$, $\chi^2_{0.02(1)} = 5.41$,

UNIT: 26
RESEARCH METHODOLOGY

GROUP-A

Answer any **TWO** of the following questions: 2×2=4

1. What do you mean by action research?
2. Differentiate between qualitative and quantitative research.
3. What do you mean by 'Mosaic Plagiarism'?
4. What do you mean by 'Dissertation and Thesis'?

GROUP-B

Answer any **TWO** of the following questions: 2×4=8

1. What are the criteria of a good sampling?
2. Write down the different sources of primary data. Differentiate between primary & secondary data.
3. Write the criteria of a good questionnaire.
4. Describe the major components of research ethics.

GROUP-C

Answer any **ONE** of the following questions: 1×8=8

1. Write down the different sections of an ideal research report writing. What is quasi experiment?
2. Discuss the importance of literature review. How is it differ from overview? State the conditions of acceptance and rejection of H_o.   4+2+2

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