PG CBCS M.Sc. Semester-III Examination, 2020 NUTRITION & DIETETICS PAPER: NUD 301

Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet <u>UNIT-25</u> Biostatistics in Nutrition

Answer any <u>two</u> questions from the following: (250 Words) 2X10=20

 What are the dispersion statistics with example? Write the relationship between Skewness and Kurtosis.
 Compute the SD and SE of the frequency distribution of BMI scores and

interpret your results after computation of Confidence intervals. Class Interval: 15-17, 18-20, 21-23, 24-26, 27-29, 30-32.

- Frequencies:
 3
 5
 8
 9
 4
 2
 2+5+5
- Relationship between Variance and Standard Deviation with suitable examples for ungroup data. Compute the 75th percentile of the frequency distributions of body weights [kg] of the following dataset:

Class intervals: 51-53 54-56 57-59 60-62 63-65 66-68 69-71

Frequencies:57142815835+53. 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 Hb% of male is significantly higher than that of female.

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

Critical t Score: $t_{0.02(18)}=2.552$ $t_{0.05(18)}=2.101.$ 3+7

4. Why ANOVA is more preferable than t-test? Classify with examples of ANOVA and Write the computation of sum of squares, variances and 'F' ratio for multiple comparison of 3 set of sample means of a variable.

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- 5. What are Regression line and equation? Write the assumptions and computation formulae for simple linear regression. Calculate computed z-value, when Sample mean =45Kg, Population mean = 55kg and SE= 2.653 and justify the nutritional status. 2+4+4
- 6. What are Regression line and equation? Write the assumptions and computation formulae for simple linear regression. Calculate computed z-value, when Sample mean =45Kg, Population mean = 55kg and SE= 2.653 and justify the nutritional status. 2+4+4

UNIT-26 Research Methodology

Answer any <u>two</u> questions from the following: (250 Words) 2X10=20

- Explain the basic research ethics that should be maintained to carry out the research proposal.
 10
- What are the personal quality requirements of a good researcher? What do you mean by plagiarism in research?
 2+8
- Write the different features of qualitative and quantitative research. State the cohort study with one example.
 5+5
- 4. Define Pilot project. Write the difference between review and overview. 4+6
- 5. State the steps adopted for the writing of a good research proposal for funding. 10
- 6. Write in short about cross sectional and longitudinal study. Discuss about the different sampling methods that are considered to carry out any research work.

4+6
