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**C/19/MSc/2/SEM/CND-201/1**

**2019**

**MSc**

**2<sup>nd</sup> Semester Examination**

**CLINICAL NUTRITION & DIETETICS**

**PAPER – CND-201**

**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.

Illustrate the answers wherever necessary.

**(Turn Over)**

**Group-A**

1. Answer any **FOUR** questions of the following.  $4 \times 2 = 8$
- Compute the mode of blood sugar level (mg/dl) of 50 individuals having median 86 and mean 84.
  - What do you mean by skewness in frequency distribution?
  - Three students obtain the same marks in a class test but on the basis of alphabetical order of their names, the positions are 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup>. Write their respective ranks.
  - Write one similarity and one dissimilarity between 'Chi square test' and 'Rank correlation test'.
  - Blood cholesterol levels of two groups of girls were measured and from student two-tail t-test, the p-value obtained was less than 0.05. What is your interpretation from such statement?
  - What is  $\bar{x}$  ?
  - Write the full form of http.
  - How do you fix a figure within text tightly?

**GROUP-B**

2. Answer any **FOUR** questions of the followings.  $4 \times 4 = 16$
- Define leptokurtic, mesokurtic and platykurtic types of frequency distribution. Write their 'K' values. What is the nature of t-distribution?  $1.5 + 1.5 + 1 = 4$
  - State the assumptions for t-tests. 4

- c) For computation of two-tail t-test using the mean difference, of  $\bar{x}_1 = 24$ ,  $\bar{x}_2 = 16$ ,  $n=10$ ,  $Sd = 16$  and  $t_{0.05(9)} = 2.262$ ,  $t_{0.01(9)} = 3.250$ . Compute the t-value and interpret your results. 4
- d) Classify correlation and cite example for each case. 4
- e) Write the conditions when Yate's correction factor is used.  
Write the formula for computation of 'fe' in 'Test of independence'. 2+2
- f) What are the utilities of nutritional analysis softwares? 4
- g) What is the purpose of using pie chart?  
What is meant by ALU? 2+2
- h) Discuss the purpose of using RAM & ROM in computer. 4

### GROUP-C

3. Answer any **TWO** from the following.

- a) Compute the 'Pearson's r' and find out whether there is a significant correlation between blood sugar level (mg/dl) and carbohydrate consumption (g/day) through diet.

Individuals	1.	2.	3	4	5	6	7	8	9
Blood glucose level (mg/dl)	110	112	98	96	100	94	88	84	101
Daily carbohydrate consumption (g/day)	220	225	198	200	210	185	170	175	195

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$$t_{0.05(7)}=2.365$$

$$t_{0.01(7)}=3.499.$$

- b) Compute the median and mode of the following frequency distribution of BMI.

Class interval →	15-17	18-20	21-23	24-26	27-29	30-32
Frequencies →	5	7	10	8	6	4

5+3

- c) In a survey of 10-sample size, the fasting blood cholesterol level given below. The ICMR reference value of this sensor is 155 mg/dl. Find out whether your sample mean is significantly different or not from the population mean or reference value.

$$t_{0.05(9)} = 2.262$$

$$t_{0.01(9)} = 3.250$$

Individuals	1	2	3	4	5	6	7	8	9	10
Blood cholesterol level (mg/dl)	140	160	138	142	152	170	122	138	135	146

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- d) Discuss about the different types of computers.

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