2022

MSHW

(B.Sc. Fourth Semester End Examination-2022)
PAPER-402T

Full Marks: 40   *Time: 02 Hrs*

The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable
Illustrate the answers wherever necessary

1. **Answer any five questions from the following:**   **5x2= 10**

a) Define medical statistics.

b) Differentiate between variables and parameters.

c) How do you interpret Mean $\pm$ 1SD and Mean $\pm$ 2SD?

d) Define degree of freedom.

e) How much variables are required for test of significant and correlation

f) Define dispersion statistics.

g) What are parametric and non-parametric tests?

h) Write any two features of normal distribution.

2. **Answer any four questions from the following:**   **4x5 = 20**

a) Complete the mean and median of the following body weights [kg] scores

Class intervals:	51-53	54-56	57-59	60-62	63-65	66-68	69-71
Frequencies:	5	7	14	28	15	8	3

b) What are the steps taken into consideration for frequency polygon?

c) How do you capture variance (S^2) and standard deviation (S) from group data with suitable example?

d) Classify correlation with examples

e) Write the conditions for adoption of Yate's' correction factor in chi-swarelast. State in short about 'Goodness of fot'   2+3

f) Write the computational formulae of SS_t, SS_b, SS_w, and F values for two groups scores.

3. **Answer any one question of the following:**   **1x10 = 10**

1. Write the different assumptions of t-test. Distinguish between unpaired and paired t-test.

How to compute 't' value from the following pair scores of haemoglobin percentage (gm%) of 9 adolescent girls before and after iron tablet supplementation.

Hb% before Fe^+ Supple:	08	10	09	10	09	08	11	10	12
Hb% after Fe^+ Supple:	14	10	12	13	12	10	13	11	15

2. Write the different importance of chi-square test. Find out whether or not significance association between Diabetes and Hypertension, when 20 individuals suffering hypertension out of 40 diabetes person where as 15 are hypertensive out of 90 non-diabetic individuals with selecting the proper critical chi-square value given below.

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

3+7