

PAPER CODE: MDU0002

KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES
TELANGANA STATE, WARANGAL – 506 002
MD (UNANI) FIRST SUMMATIVE ASSESSMENT SUPPLEMENTRAY
EXAMINATIONS: NOVEMBER 2025
BIOSTATISTICS
(COMMON FOR ALL SPECIALITIES)

Time: 3 Hours.

Max Marks: 100

Note: Answer all questions.

Give Diagrammatic representation wherever necessary.

Analytical based structured question (ABQ) 1 X 20 = 20

1. What is normal distribution and normal curve. Write in detail.

Short answer questions: 8 X 5 = 40

2. Prepare a histogram from the following data recorded on number of tillers of a wheat variety.

No of tillers per plant	No of plants
0-6	4
6-12	68
12-18	15
18-24	20
24-30	12
30-36	6

3. Write the properties of normal probability curve.
4. Define level of significance and power of test.
5. Explain 'z' test for single mean.
6. Write a note on Mann-Whitney u test.
7. Write the different types of fertility rates.
8. The height and body weight of ten males are given below:
Calculate the correlation coefficient.

Individuals	1	2	3	4	5	6	7	8	9	10
Height(inches)	65	68	62	70	65	72	67	66	68	70
Weight(pounds)	128	140	120	152	138	160	135	130	125	165

9. Explain F-test in brief.

Long answer questions:**4 X 10 = 40**

10. Calculate the arithmetic mean from the data given in the table.

No of leaves	No of plants
5	6
10	5
15	9
20	4
25	3
30	6
35	4
40	3

11. What is the probability of getting 0,1,2,3 and 4 heads when the coin is tossed four times?

12. Sleeping drug and neutral control preparations were tested in turn on 14 patients in a hospital and gave the following results:

No. of hours of sleep		
patients	drug	control
1	8.2	7.2
2	10.6	8.6
3	7.5	7.3
4	9.0	9.4
5	5.4	5.1
6	6.1	5.4
7	9.6	10.6
8	5.9	6.9
9	10.2	9.0
10	7.1	6.5
11	9.7	7.9
12	8.5	8.7
13	7.9	6.9
14	8.3	7.3

(tabulated value of t at 5% significance level is 2.160)

13. Write a note on measures of disease frequency.
