JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-III Semester (BT)

COURSE CODE (CREDITS): 18B11MA321(4) MAX. MARKS: 15

COURSE NAME: PROBABILITY AND STATISTICAL TECHNIQUES

COURSE INSTRUCTOR: Dr. B. K. Pathak MAX. TIME: 1 Hour

Note: *All questions are compulsory. Marks are indicated against each question in square brackets.*

Q 1. Find the missing frequency from the following data; it is being given that 19.92 is the average number of tablets for being cured: [CO-1] [3]

No. of tablets	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
No. of persons cured	11	13	16	14	?	9	17	6	4

Q 2. (a) Construct the stem and leaf plot from the following data: [CO-1] [3]

2.3, 2.5, 2.5, 2.7, 2.8 3.2, 3.6, 3.6, 4.5, 5.0.

(b) A stem and leaf display describes two-digit integers between 20 and 80. For one of the classes displayed, the row appears as 3 | 2 6 8. What numeric values are being described?

Q 3. Compute the Karl Pearson's coefficient of skewness from the following data:

25, 15, 23, 40, 27, 25, 23, 25, 20 [CO-1] [3]

Q 4. The probability of passing in subject A, B, C and D are $\frac{3}{4}, \frac{2}{3}, \frac{4}{5}$ and $\frac{1}{2}$ respectively, To qualify in the examination a student should pass in A and two subjects among the three, what is the probability of qualifying in that examination. [CO-2] [3]

Q 5. A couple has two children. Find the probability that both children are boys, if it is known that at least one of the children is boy. [CO-2] [3]

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