

## Pretest: DIB 2204 Business Statistics

1. Below are data collected from patients who suffer from migraine headaches. The patients were instructed to take their assigned medicine ABC as soon as their headaches and to record how much time passed before the drugs gave relief.

The data below show the number of minutes that elapsed before a patient got relief.

**Medicine ABC:** (minutes)

25	18	21	26	28	49	31	24	42	44	53
52	46	44	36	32	34	29	28	26	40	41

- a) Draw stem-and-leaf plot display of the given data above.
- b) Find the mean, median and mode of given data above.
2. Mr. John want to buy a new mobile phone. There are two models: Model A and Model A+, three colours: silver, gold and red; and three storages: 64 GB, 128 GB and 256 GB.
- a) Draw a tree diagram to show total possible choices.
- b) How many total choices Mr. John has? Use a fundamental principles of counting to verify your answer.
3. If Ms.Pada sleeps well, she always turns up for jogging the next morning. If she drinks coffee in the evening, the probability that she sleeps well is  $\frac{1}{5}$ . If she does not sleep well, the probability that she turns up for jogging the next morning is  $\frac{1}{6}$ . Yesterday evening Ms. Pada drank coffee. What is the probability that she will turn up for jogging?
4. To help determine the relationship between the time spend in the study of statistics and student's scores. The teacher took sample of 10 students and their statistics scores are listed here.

Hours	23	15	17	9	20	13	12	10	18	14
Scores	84	80	80	72	85	78	75	72	84	78

- a) Plot a scatter diagram to determine the relationship between the time spend in the study of statistics and student's scores.
- b) Find an Estimated Least- Square regression line.
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