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Daffodil International University

Class Test-02

Student ID:

Program: B.Sc. in CSE

Marks obtained: 15

Course Code: STA101

Semester: Fall 2025

Section: **65_H**

Date: 26.10.2025

Course Title: Statistics and Probability

Time: 30 minutes

Answer all the questions

Marks

1) The **daily sales (in thousand taka)** of a small shop were recorded for last 18 days:

48, 52, 47, 53, 50, 56, 33, 50, 65, 70, 68, 47, 55, 53, 59, 51, 48, 90

a. Draw a **modified boxplot** to represent the sales data and detect the unusual observations (if any). **4**

b. Identify the shape of the sales dataset using the box-whisker plot **1**

2) A diabetic patient is interested in determining how the amount of aerobic exercise impacts his blood sugar. On different days, he runs different distances and measures his blood sugar after completing his run. The data collected from his walking recorded over last 10 days:

Distance (miles)	2	1.5	2.5	3	3.25	3.5	3.75	4	3.9
Blood sugar (mg/dL)	136	146	131	120	116	104	95	85	94

a. Identify the nature of relationship between running distance and blood sugar and comment on your finding. **5**

b. Which of the two variables shows more stability? Use a relative measure of dispersion to justify your answer. **5**

Start writing from here