Daffodil International University

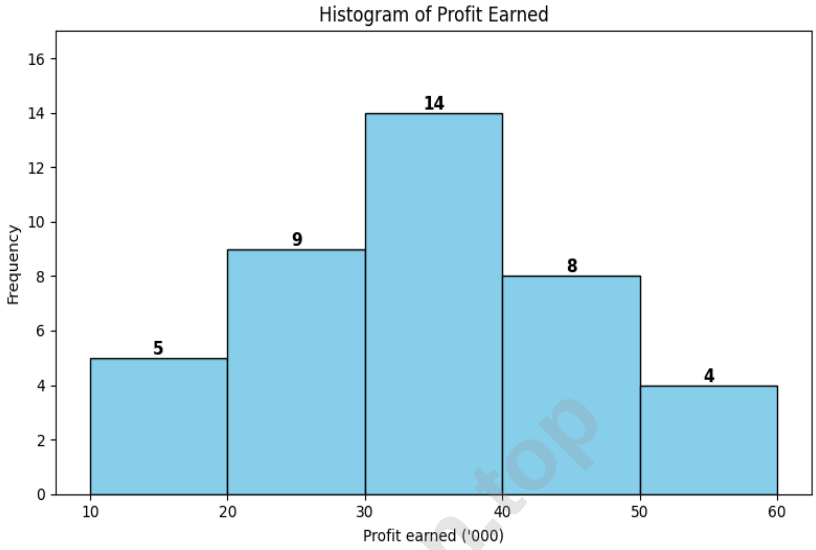
Department of Business Administration
Faculty of Business and Entrepreneurship
Midterm Examination, Spring 2026
Course Code: 0542-213, Course Title: Statistics for Decision-Making
Teachers' Initials: UFU, Tuhin Section: All

Time: 01:30 Hours **Marks: 25**

[Answer all the following questions. The figures in the right margin indicate the full marks and corresponding course outcomes**]**

<table>
<tr><td>01</td><td>a)</td><td>Demonstrate Stratified sampling technique with example.</td><td>(CLO 2, L 2) 2</td></tr>
<tr><td></td><td>b)</td><td>Classify the variables by type (Qualitative/Quantitative and Discrete/Continuous) and scale of measurement:
Daily study hour, Place of birth, Annual profit, Temperature of a room, Number of Laptops in a shop, Customer satisfaction level, House number.</td><td>(CLO 2, L 2) 3</td></tr>
<tr><td>02</td><td></td><td>The age of 20 cricket players is given here:
31 31 30 22 28 32 33 29 27 35 32 42 28 30 35 26 25 32 26 30</td><td></td></tr>
<tr><td></td><td>a)</td><td>Construct a frequency distribution table and calculate Percentage frequency.</td><td>(CLO 3, L 3) 4</td></tr>
<tr><td></td><td>b)</td><td>Develop an Ogive curve.</td><td>(CLO 3, L 3) 2</td></tr>
<tr><td></td><td>c)</td><td>Two salesmen selling the same product have the following record over a long period of time:
<table>
<tr><td></td><td>Salesman 1</td><td>Salesman 2</td></tr>
<tr><td>Average Sale per month</td><td>Tk. 30000</td><td>Tk. 35000</td></tr>
<tr><td>Standard Deviation</td><td>Tk. 2500</td><td>Tk. 3600</td></tr>
</table>
Apply appropriate statistical measures to determine which salesman is more stable.</td><td>(CLO 3, L 3) 3</td></tr>
<tr><td>03</td><td></td><td>Suppose following data represents the number of tickets sold in the last 15 days at Mirpur Cineplex: 250, 320, 280, 310, 400, 290, 300, 330, 180, 290, 480, 285, 275, 260, 295.</td><td></td></tr>
<tr><td></td><td>a)</td><td>Calculate the average number of tickets sold at Mirpur Cineplex.</td><td>(CLO 3, L 3) 2</td></tr>
<tr><td></td><td>b)</td><td>Identify whether there is any outlier in the above dataset? Comment on your findings.</td><td>(CLO 3, L 3) 4</td></tr>
</table>

P.T.O.

04		The profit earned (in '000) from some companies is represented with a histogram as follows:  	
	a)	**Analyze** the median profit earned by the companies.	(CLO 4, L 4) 2
	a)	**Compute** the Standard deviation of profit with appropriate interpretation.	(CLO 4, L 4) 3