

International Islamic University Chittagong
Faculty of Shariah and Islamic Studies
Department of SHIS
Semester End Examination

Program: B A (Hon's)
 Course Title: Statistics for Research in Shariah
 Studies
 Time: 2 hr 30 minutes.

Semester: Spring -2025
 Course Code: STAT-3503

Full marks: 50

Bloom's Levels of the Questions						
Bloom's Meaning	Create	Evaluate	Analyze	Apply	Understand	Remember

[Note: Answer all questions. Figures in the right margin indicate full marks. Answer should be brief, to the point and relevant. Parts of each question should be answered consecutively]

Serial No		Questions	Marks	Bloom's level	CLO																
1	a	Explain the term coefficient of range (CR). What purpose does coefficient of variance serve in research?	2	Understand	CLO-1																
	b	A survey of domestic consumption of Karnafuly Gas gave the following distribution of current consumed: <table border="1"><thead><tr><th>Number of units</th><th>No. of consumers</th></tr></thead><tbody><tr><td>0-200</td><td>9</td></tr><tr><td>200-400</td><td>18</td></tr><tr><td>400-600</td><td>27</td></tr><tr><td>600-800</td><td>32</td></tr><tr><td>800-1000</td><td>45</td></tr><tr><td>1000-1200</td><td>38</td></tr><tr><td>1200-1400</td><td>22</td></tr></tbody></table> Compute average deviation (AD) and coefficient of variation (CV) of consumption from median.	Number of units	No. of consumers	0-200	9	200-400	18	400-600	27	600-800	32	800-1000	45	1000-1200	38	1200-1400	22	8	Analyze	CLO-2
Number of units	No. of consumers																				
0-200	9																				
200-400	18																				
400-600	27																				
600-800	32																				
800-1000	45																				
1000-1200	38																				
1200-1400	22																				
		Or of 1																			
		What do you mean by range and coefficient of variance? Explain the advantages of standard deviation	10	Analyze	CLO-3																
2	a	What is sampling unit and population? What are the reasons for selecting a sample from population?	6	Remember	CLO-2																
	b	Enumerate the probability sampling and non probability sampling.	4	Analyze	CLO-2																

3	a	Distinguish between parameter and statistic. Suppose you are asked to conduct a survey on academic performance of the students of FSIS at IIUC. How will you proceed?	6	Analyze	CLO-4														
	b	Suppose a sample of 200 students is to be drawn from a population consisting of 2000 students belonging to three departments QGIS, SHIS & DIS under the Faculty of Shariah and Islamic Studies at IIUC. The number of students in the department of QGIS is 800, SHIS is 600 and the DIS is 600. How will you draw the sample using proportional allocation?	4	Analyze	CLO-4														
4		What do you mean by case study? Discuss the case study research steps and methods with examples.	10	Evaluate	CLO-2														
		Or of 4																	
		What does regression analysis examine? Consider the cost (C) and quantity of supply (S) information as below: <table border="1"><tr><td>C</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>S</td><td>10</td><td>12</td><td>15</td><td>18</td><td>22</td><td>26</td></tr></table> Estimate the cost function and find out the intercept and slope of the cost function.	C	1	2	3	4	5	6	S	10	12	15	18	22	26	10	Analyze	CLO-4
C	1	2	3	4	5	6													
S	10	12	15	18	22	26													
5	a	What do you mean by harmonic mean and geometric mean?	2	Remember	CLO-1														
	b	The following data relate to the sales of 100 companies, <table border="1"><tr><td>Sales (Tk. Lakhs)</td><td>No. of companies</td></tr><tr><td>Below 50</td><td>12</td></tr><tr><td>50-60</td><td>18</td></tr><tr><td>60-70</td><td>25</td></tr><tr><td>70-80</td><td>30</td></tr><tr><td>80-90</td><td>10</td></tr><tr><td>90-100</td><td>5</td></tr></table> Calculate the median and modal sales of companies.	Sales (Tk. Lakhs)	No. of companies	Below 50	12	50-60	18	60-70	25	70-80	30	80-90	10	90-100	5	8	Analyze	CLO-3
Sales (Tk. Lakhs)	No. of companies																		
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THE END