



ALLAMA IQBAL OPEN UNIVERSITY
Semester Terminal Exam Autumn 2020

Program /level:	BBA/Graduation	Maximum Marks	100
Title /Course Code	Applied Math for Business & Social Sciences (8405)	Pass marks	50

Instructions for Exams:

1. Attempt All Questions.
2. Write answers in your own words and avoid copying from an internet source or any book.
3. Be precise, avoid unnecessary details, answer to each question must be between 600-800 words.
4. Students are advised to upload their answer sheets/solutions on LMS portal as soon as they complete their answers and not to wait for 8:30 PM.
5. Submissions after due date & time will not be entertained. Attach undertaking with each course code which were allowed to attempt in Urdu.
6. If plagiarism found, Student may be declared fail.

Q. No.	Questions	Marks
1	a) The insurance company uses probability theory to calculate premium rates, but life insurers know for certain that every policy holder is going to die. Does this mean that probability theory does not apply to life insurance business? Explain.	20
	b) A well-known soft drink company decides to alter the formula of its oldest and most popular product. How might probability theory be involved in such a decision?	15
2	Pricing decision is one of the most important decisions for a profit making business. In your opinion, how can the following techniques be helpful for the managers when making a pricing decision: 1. Linear Equations 2. Break-even Models 3. Probability	35
3	You being the student of mathematics and business, explain how the following concepts are helpful to the managers in a business environment: a) Multivariate Functions b) Exponential Functions c) Permutations and Continuations d) Probabilities	30