



ALLAMA IQBAL OPEN UNIVERSITY
Semester Terminal Exam Autumn 2020

Program /level:	ADE/Bed/BS /Graduation	Maximum Marks	100
Title /Course Code	General Mathematics and Statistics (6401)	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	<p>Define Zakat and Explain who is Sahb-e-Zakat? Also Calculate the amount of Zakat on an amount of Rs. 3,00,000, gold of weight 40 grams and silver of weight 500 grams, whereas the rate of gold is Rs. 3500 per gram and the rate of silver Rs. 400 per gram.</p> <p>If $U = \{1, 3, 5, 7, 9, 11, 13\}$ and $A = \{3, 5, 7\}$ find A' and Prove that $A \cap A' = \phi$</p> <p>Find the value of x when $A = \begin{bmatrix} 2x & -4 \\ -1 & 5 \end{bmatrix}$ and $A = 16$</p>	(13+10+10)														
2	<p>Define Polynomial and degree of Polynomial. Solve $x^2 + 6x - 7 = 0$ by completing square method.</p> <p>A tree is 72m high. Find the angle of elevation of its top 100m away on the ground level.</p>	(18+15)														
3	<p>Define Hero's Formula and its applications.</p> <p>Perimeter of rectangle is 50cm. Find its width if length is 15cm.</p> <p>Define Quartiles, Deciles and Percentiles. Also find the standard deviation of the following data.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>No. of student</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>Marks</td> <td>60</td> <td>70</td> <td>30</td> <td>90</td> <td>80</td> <td>40</td> </tr> </table>	No. of student	1	2	3	4	5	6	Marks	60	70	30	90	80	40	(08+08+18)
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