



ALLAMA IQBAL OPEN UNIVERSITY
Semester Terminal Exam Autumn 2020

Program /level:	BS/Graduation	Maximum Marks	100
Title /Course Code	Introduction to ICT (9421)	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) What is Information and Communication Technology (ICT)? And why we need to study ICT?	10
	b) Explain the five basic operations of a Computer System. Also draw the diagram to explain the basic organization of a computer system.	10
	c) Convert the following numbers into their equivalent number system: i. $(786)_{10} = (?)_2$ ii. $(12345)_6 = (?)_{13}$	10
2	a) Find the complement of the following given numbers: i. $(6)_8$ ii. $(1011010)_2$	15
	b) Construct a logic circuit from the following Boolean expression: Boolean Expression = $\overline{A} \cdot \overline{B} + C \cdot D + \overline{E} \cdot \overline{F}$	15
3	a) Why software is needed to run a computer? Discuss the difference between system software and application software.	10
	b) Define algorithm. Why algorithms are used to solve problems? Discuss the difference between pseudo-code and flowchart.	10
	c) Write note on the following memory modules: i. Register ii. Cache iii. Primary Memory iv. Secondary Storage	20