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Air University
(Mid-Term Examination: Fall 2021)
Department of Cyber Security

Subject: Intro to ICT
Course Code: CS180
Class: BS-CYS Fall 21
Section: A-B

Total Marks: 30
Date: Nov 12, 2021
Duration: 2 Hours
FM Name: Zia Muhammad

Answer all questions.

Q. No	Questions	Marks	CLO
1	<p>a. Assad wants to communicate with Isaam about the scheduled ICT class. What would be the communication process? Draw and elaborate necessary components, Mod of message transmission, and communication channel.</p> <p>b. You have to configure a printer with 5 computers in the networks lab, in such a way that every computer has access to print documents. What kind of network topology is effective to optimize expense and efficiency? Explain with the help of a network diagram.</p>	(2*5=10)	4
2	<p>a. Perform following conversions elaborating all necessary steps.</p> <p>i. Convert $(409)_{10}$ Into hexadecimal. 199</p> <p>ii. Convert $(038)_8$ Into decimal. 32</p> <p>iii. Convert $(C09)_{16}$ Into binary. 10000001001</p> <p>iv. Convert $(8B5)_{16}$ Into octal. 64265</p> <p>v. Convert $(101101)_2$ Into Hexadecimal. 02D</p> <p>b. Define these terminologies with an example:</p> <p>i. ISP ✓</p> <p>ii. WWW ✓</p> <p>iii. HTTP(s) ✓</p> <p>iv. URL ✓</p> <p>v. IP ✓</p>	(2*5=10)	3
3	<p>a. What Operating System does? Explain its four key responsibilities.</p> <p>b. Write a short note on simplex, half-duplex, and full-duplex transmission modes with an example and diagram.</p>	(2*5=10)	3

***** End of Examination Paper *****