



COMSATS University Islamabad, Lahore Campus
Department of Computer Science

Terminal Examination –Fall 2021

Course Title:	Introduction to ICT			Course Code:	CSC-101	Credit Hours:	3(2,1)
Course Instructor/s:	Mr. Zuhair Qadir, Dr. Jawad Shafi, Miss. Saman Safdar, Mr. Tahir Muhammad			Programme Name:	BSE / BSCS		
Semester:	1 st	Batch:	FA21	Section:		Time	3 Hour
Date	06 - January - 2022			Maximum Marks:	50		
Student's Name:				Reg. No.			
Important Instructions / Guidelines: <ul style="list-style-type: none">Cheating or use of unfair means will lead to F in the course.Use of calculators or electronics are not allowed.Answer all questions on the answer sheet please!Do not write anything on the question paper except name and registration number.							

Q 1: Objectives. Circle the correct answer.

[Total Marks = 15]

a) True or False

[Marks = 5]

- A computer virus can only be transferred to another computer via a storage medium. T F
- Secure Web pages use encryption to securely transfer data sent via those pages. T F
- We can use Do-While instead of While loop. T F
- Dry run gives us the state of variables at each statement of code. T F
- Pseudo code/flow charts increase understanding of the processes they represent. T F

b) MCQs:

[Marks = 10]

- Which of the following act as middleware in database?
 - JavaScript
 - Oracle Database
 - MS Access
 - SQL Server
- A behavioural approach to determine if computer is intelligent
 - Turing Test
 - Tuning Test
 - Turning Test
 - None of the above
- _____ work better in recognition tasks.
 - Human
 - Computers
 - Machine
 - None of these
- _____ is a type of software that can be installed on computers, and which collects small pieces of information about users without their knowledge.
 - Antivirus
 - Firewall

- b. Axon d. Spyware
5. The branch of computer science which deal with writing computer programs that can solve problems creatively, is called _____.
- a. Cloud computing c. Artificial Intelligence
- b. Cyber security d. Image processing
6. Which of the following is the protocol used to transfer data over the Internet?
- a. Wi-Fi c. Bluetooth
- b. TCP/IP d. All of these
7. Sending an e-mail that looks like it came from someone else in order to obtain information for fraudulent purposes is called.
- a. Hacking c. Online auction fraud
- b. Phishing d. Spoofing
8. Router is used for _____
- a. Forwarded data on internet using fastest available path c. Backup server
- b. Connect computers so they can store data d. None of these
9. Fundamental and distinguish component in database is
- a. Data c. Information
- b. Entity d. Metadata
10. Cryptography is a study of _____
- a. A scheme of encryption/decryption c. Attacks
- b. Spyware and firewall d. Ciphers

Q 2: Draw diagram of Basic Organization of a computer system

[Marks = 4]

**Q 3: Write Binary Code for the word "ACE" in ASCII-8 (8-bit code).
How many bytes are required for its representation?**

A, C and E have following decimal values: 65, 67 and 69, respectively.

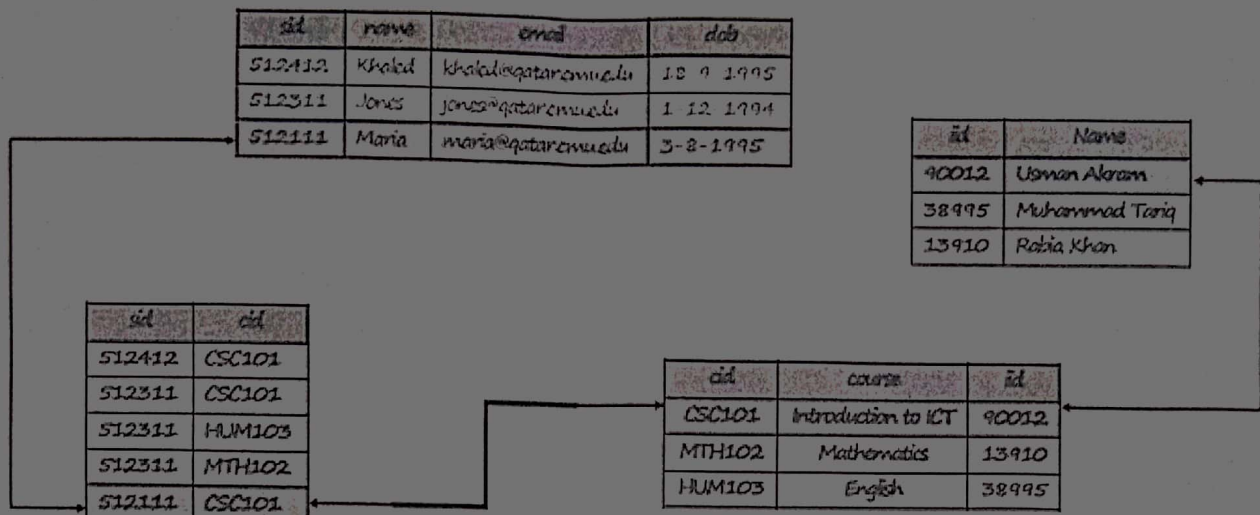
[Marks = 3]

Q 4: a) Write four database design models.

[Marks = 2+4 = 6]

<u>Sr No</u>	<u>Design model name</u>
<u>1</u>	
<u>2</u>	
<u>3</u>	
<u>4</u>	

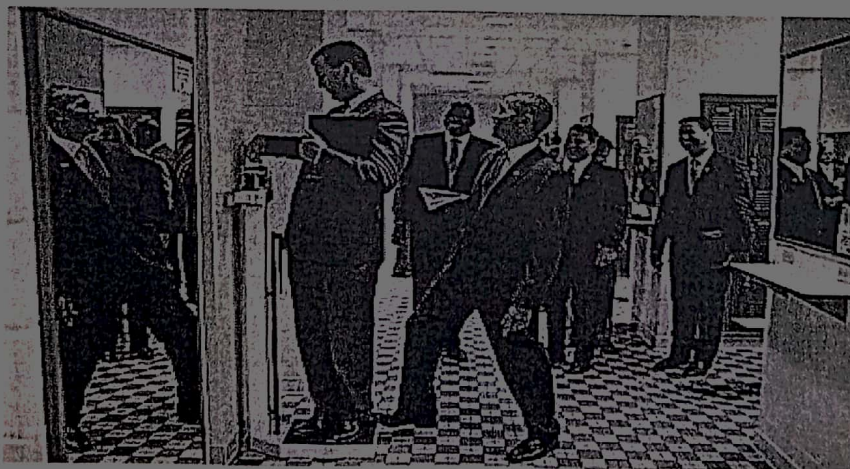
b) Explain in detail the working of the model represented by following diagram.



Q 5: Compute the following conversions among different number systems, and fill the table [Marks = 6]

Decimal	Binary	Octal	Hexadecimal
222			
	1011		
		171	
			AF1

Q 6: Consider the current breakthroughs in Artificial Intelligence and the image given below. Briefly describe the following: [Marks 9]



a. What AI can tell in this picture?

[Marks = 3]

b. What humans can perceive in this picture.

[Marks = 3]

c. In the current era humans are continuously being replaced by the machines. Here the question arises also that "Can a machine think". To answer this question an approach was suggested to determine whether a computer can think or not. Name the approach and how it is used to identify machine intelligence?

[Marks = 3]

Q7: Write Pseudocode and algorithm for the following problem statement:

[Marks = 7]

"Print the tables of 3 and 6 only up to 10 using loops. Count the number of times multiplication is done and display the sum of overall multiplication for each case 3 and 6"