STUDENT ASSIGNMENTS (SESSION 2022-23)

Certificate in Computer Hardware and Network Technology (Distance Mode)

Guidelines to submit Assignments
The students are required to read carefully and follow the instructions given below:

1. Submission of one complete Assignment in each paper of the programme is compulsory.
2. Completed Handwritten Assignments on A4 size papers in a PDF format need to be submitted on Google Classroom on or before the due date
3. Write your Name, Father's Name and Roll Number as required on the cover page of each Assignment.
4. For Assignments Submitted after due date mentioned, a late fee of Rs. 100/- per assignment will be payable through Demand Draft in favor of Jamia Millia Islamia, Payable at New Delhi
5. For ex-students who failed to submit assignments during the course of the programme are required to submit Rs. 200/- per assignment payable through Demand Draft in favor of Jamia Millia Islamia, Payable at New Delhi.
6. Please go through your Programme Guide carefully for further details.
7. Last Date for Assignment Submission is **15-Jul.-2023**
8. **Link for Google Class Room:**
   https://classroom.google.com/c/NTIyNjA3NTUwMzQ0?cjc=2jra3fl

NOTE: Attempt any **THREE** questions from each Assignment and Each Question carry **10** marks. Total Marks for each Assignment is 30.

CCH-101 Operating System	
1	What is Operating System? Explain functions of an Operating System in detail.
2	What is a process? What are the different states of a process?
3	What is a Scheduling Algorithm? Name different types of scheduling algorithms.
4	What do you mean by Semaphore in OS? Why is it used?
5	What is different between main memory and secondary memory.

CCH-102 Fundamentals of Computer & Network	
1	What is Motherboard? Discuss in detail the major components of the Motherboard.
2	What is MSDOS? Explain the difference between internal and external commands with the help of any five external and five internal DOS commands with syntax.
3	Classify the memories on the basis of type of material used and write in details about each of them.
4	What is printer? Discuss the different types of Printers and their working

	principles?
5	Define the term Network and describe different networking devices in detail.

CCH-103 Computer Network	
1	What is IP Address? Briefly explain different classes of IP Address and also find the class, net id, and host id for the following IP addresses i) 11000001 10000011 00011011 11111111 ii) 249.155.251.15
2	Explain working of each layer of OSI model in detail.
3	What is Data Communication? Discuss CDMA, TDMA, FDMA and WDMA.
4	Explain in detail the following protocols :FTP, SMTP, and HTTP
5	Discuss the working principle of networking devices: HUB, Switch, and Router

CCH-104 Network Operating System	
1	What is a network operating system? Define the features of Linux/Windows server family?
2	How to install and configure a Linux/Windows server? Explain all steps briefly?
3	What is shell scripting? Mention some importance of using shell scripts?
4	Write a Linux Shell script to multiply the numbers?
5	What is Huffman Coding? Define the algorithm with the help of a suitable example.

CCH-105 Trouble Shooting	
1	What do you mean by Troubleshooting ?Discuss some of the mouse errors and their solutions.
2	When does the missing operating system message appear ?
3	What is a computer virus ? Define Logic bomb.
4	What is hardware profile? Define device driver.
5	Write short note on : disk clean up and disk fragmentation.