

**STUDENT ASSIGNMENTS  
(SESSION 2021-22)**

**INSTRUCTIONS**

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

- Submission of one complete Assignment in each course of the programme every year is compulsory.
- Completed Assignments on prescribed Assignment booklets are to be submitted by hand or through post to the Study Centre/Programme Coordinator, CDOL as per dates mentioned in the Academic Calendar 2021-22 (<http://jmi.ac.in/bulletinboard/academic-calendar/cdol>).
- For Assignments Submitted after dates mentioned in the Academic Calendar, a late fee of **Rs. 100/-** per Assignment will be payable to CDOL through Demand Draft in favour of Jamia Millia Islamia, Payable at New Delhi.
- For Ex-Students who failed to submit Assignments during the course of the programme are required to submit **Rs. 200/-** per Assignment to CDOL in the form of Demand Draft in favour of Jamia Millia Islamia, Payable at New Delhi.
- Write your name, roll number and other details as required on the cover page of **Assignment Booklet**.
- **For your record you may keep a photocopy of your Assignment.**
- Contact your Study Centre/ Programme Coordinator to collect evaluated Assignments.
- **Please go through your Programme Guide carefully.**

## Certificate in Hardware and Network Technology (CHNT)

---

**Course Name: Operating System**  
**Session: 2021-22**

**Course Code: CCH –101**  
**Max. Marks: 30**

---

*Note: Attempt any three Questions. All questions carry equal marks.*

- |   |                                                                                                                                        |
|---|----------------------------------------------------------------------------------------------------------------------------------------|
| 1 | What is Operating System? Explain different types of Operating System with advantages and Disadvantages.                               |
| 2 | Explain the concept of Dead Lock and Describe methods of Deadlock handling.                                                            |
| 3 | Explain Banker's Algorithm with a proper example.                                                                                      |
| 4 | Explain the concept of Paging and Segmentation and how does these techniques solve the problem of internal and external fragmentation? |
| 5 | Explain File Access Methods and File Allocation Methods in detail.                                                                     |

---

**Course Name: Fundamentals of Computer & Network**  
**Session: 2021-22**

**Course Code: CCH –102**  
**Max. Marks: 30**

---

*Note: Attempt any three Questions. All questions carry equal marks.*

- |   |                                                                                                                                                             |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Discuss different types of System board with their features.                                                                                                |
| 2 | Classify the memories on the basis of type of material used and write in details about each of them.                                                        |
| 3 | 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. |
| 4 | What are the different types of Printers and their working principles?                                                                                      |
| 5 | Describe different networking devices in detail.                                                                                                            |

---

**Course Name: Computer Network**

**Course Code: CCH –103**

**Session: 2021-22**

**Max. Marks: 30**

---

***Note: Attempt any three Questions. All questions carry equal marks.***

1	Discuss OSI-ISO model and TCP/IP protocol suite in detail.
2	Explain the various access control protocols: TDMA, FDMA, and CDMA
3	What is IP address? Differentiate between IPV4 and IPV6 schemes of IP addressing
4	With reference to the given IPV4 address: 200.115.23.86 answer the following questions: i. Class of the IP address. ii. Directed broadcast address iii. Limited broadcast address. iv. Total number of IP address in each Network. v. Total number of hosts that can be configured in each network.
5	Explain in detail the following application layer protocols: DNS, HTTP, and DHCP

---

**Course Name: Network Operating System**

**Course Code: CCH –**

**104 Session: 2021-22**

**Max. Marks: 30**

---

***Note: Attempt any three Questions. All questions carry equal marks.***

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.

---

**Course Name: Trouble shooting**

**Course Code: CCH –105**

---

**Session: 2021-22**

**Max. Marks: 30**

---

***Note: Attempt any three Questions. All questions carry equal marks.***

- |                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Define Troubleshooting. What are the different categories of faults ? Explain.                                                                     |
| 2 What do you mean by computer viruses?What are the different categories of computer viruses? Explain each of them.                                  |
| 3 What do you mean by the term hardware profile? Describe the steps to create , enable or disable and rename hardware profile.                       |
| 4 Define maintenance. Write note on (a) Preventive maintenance (b) Corrective maintenance                                                            |
| 5 What do you mean by Database management system (DBMS).Write atleast 10 applications of DBMS in different field of computer system in 21st century. |
-

\*\*\*\*\*

\*\*\*\*\*