

**STUDENT'S ASSIGNMENTS**  
**Certificate in Computer Hardware & Network  
Technology (CCHNT)**  
**(DISTANCE MODE)**  
**SESSION 2020-21**



**CENTRE FOR DISTANCE AND ONLINE EDUCATION**  
**JAMIA MILLIA ISLAMIA, NEW DELHI – 110025**

## **STUDENT ASSIGNMENTS**

**(SESSION 2020-21)**

### **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 Booklet are to be submitted by hand or through post to the Study Centre/Programme Coordinator, CDOL as per dates mentioned in the Academic Calendar 2020-21 (<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 course assignment will be payable to through 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 Learner Support Centre/ Programme Coordinator to collect evaluated Assignments booklet
- Please go through your Programme Guide carefully for further details.

### **CCH101: Operating System**

**Session: 2020-21**

**M.Marks: 30**

**NOTE: Attempt any three questions. All questions carry equal marks.**

1. What is Deadlock in operating System? Explain any one methods of deadlock avoidance with example
2. Explain the structure of UNIX operating system.
3. What are the differences between Internal and External Fragmentation?
4. Explain different techniques used for Disk management in Operating System.
5. Explain Following
  - a. Batch Processing
  - b. Long-term scheduler and Short-term Scheduler
  - c. Random and semi-random access of memory

### **CCH102: Fundamentals of Computer and Network**

**Session: 2020-21**

**M.Marks: 30**

**NOTE: Attempt any three questions. All questions carry equal marks.**

1. Explain different types of System board with their features.
2. What are the differences between RAM and ROM.
3. What are the Operating System commands that used for HD management?
4. Describe different types of Printers.
5. Explain the following
  - a. Repeater and Router
  - b. TV tuner Cards
  - c. Solid State Disk
  - d. EISA and VESA

### **CCH103: Computer Network**

**Session: 2020-21**

**M.Marks: 30**

**NOTE: Attempt any three questions. All questions carry equal marks.**

1. Compare CDMA and TDMA channel allocation techniques
2. What is IP Address? Briefly explain different classes of an IP Address.
3. Explain in detail:
  - a. FTP,
  - b. TFTP
  - c. NFS
  - d. RPC
  - e. MIME

4. Compare OSI and TCP model in detail.
5. Explain the working of ARP and RARP protocols

### **CCH 104: Network Operating System**

**Session: 2020-21**

**M.Marks: 30**

**NOTE: Attempt any three questions. All questions carry equal marks.**

1. Write down the tasks of UNIX operating System.
2. What is Shell? What are the different types of shell in UNIX operating system?
3. What are the applications of Multimedia? Also discuss hardware and authoring tools of multimedia.
4. Explain Huffman Coding with an example and for what purpose this coding used.
5. Write brief note on
  - a. Batch Programming
  - b. Plain Text and Cipher Text
  - c. Digital Signature
  - d. Kernel

### **CCH 105: Trouble-Shooting**

**Session: 2020-21**

**M.Marks: 30**

**NOTE: Attempt any three questions. All questions carry equal marks.**

1. What do you understand by Trouble Shooting? Explain how does Software faults different from Hardware Faults?
2. Explain Operating System and DBMS errors and suggest few ways to prevent these errors
3. Explain the following
  - a. System Backup
  - b. Data Backup
  - c. Fault Tolerance
  - d. Disk Clean
4. What types of services are provided to customer for System maintenance?
5. Describe the following
  - a. Ethernet card,
  - b. fax card,
  - c. modem,
  - d. serial and parallel port,

e. display card