

Assignments

2018-19

Certificate in Computer Hardware & Network Technology

CCHNT

**Centre for Distance & Open Learning
Jamia Millia Islamia
New Delhi-110025**

STUDENT ASSIGNMENTS (SESSION 2018-19) 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 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 2018-19.
(<https://www.jmi.ac.in/bulletinboard/academiccalendar/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 own 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.

**ASSIGNMENT: CERTIFICATE IN COMPUTER HARDWARE & NETWORK
TECHNOLOGY (CCHNT)
(DISTANCE MODE)**

Operating System - (CCH-101)

Session: 2018-19

Marks: 30

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

1. Differentiate between Multiprogramming and Timesharing (Multitasking).
2. What is Deadlock and state the necessary conditions for a system to hold deadlock.
3. Consider the following set of processes arrive for execution at the time indicated:

Process	Burst time	Arrival Time
P1	8	0
P2	4	1
P3	9	2
P4	5	3

What is the average waiting and turnaround time for these processes with FCFS and SJF scheduling algorithm.

4. A disk with 1000 cylinders 0 to 999, compute the number of tracks the disk arm must move to satisfy the entire request in the disk queue. Assume the last request serviced was at track 345 and the head is moving towards track 0. The queue in Shortest Seek Time First (SSTF) order contains the request for the following tracks:
475,105,376,123, 874,692,300,120
5. Given memory partitions of 100 kb, 500 kb, 200 kb, 300 and 600 kb (in order) , how would each of the first fit, best fit and worst fit algorithm place processes of 212 kb, 417 kb, 112 kb and 426 kb (in order). Which algorithm makes the most efficient use of memory?

Fundamentals of Computer & Network Course - (CCH-102)

Session: 2018-19

Marks: 30

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

1. Discuss different types of the boards which are used in computers systems; and explain that board which are employed to connect the following components like north-pole, south-pole, CPU, RAM, etc.
2. How primary memory is used to improve the performance of computer system; List other hardware use to improve the performance of the system using memories.
3. Illustrate the concept of volatile and non-volatile memories with examples; and also classify the memories on the bases of material used like magnetic, optical, semi-conductor etc.
4. List out various input/output device with appropriate diagram and explain working principle of each device (At least 10 input and 10 output devices).
5. Discuss various types of networks topologies (NT) which are used to design the computer networks. Use suitable example to explain how NT are used to design an Internet.

Computer Network (CCH-103)

Session: 2018-19

Marks: 30

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

1. Explain working of each layer of OSI model.
2. What is IP Address? Briefly explain different classes of IP Address and hence find out the class of following IP addresses
 - i) 11000001 10000011 00011011 11111111
 - ii) 249.155.251.15
3. What is FDDI network technology? Explain how does it work?
4. What is ARP protocol? Explain the working and format of ARP Protocol.
5. Explain Architecture and working of Dynamic Host Configuration Protocol.

Network Operating System (CCH-104)

Session: 2018-19

Marks: 30

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

1. What is Digital Signature? And how does it implemented in security of document?
2. Write detail introduction of Window Server Family?
3. What do you understand by System Administration? Write down the duties of System Administrator.
4. Write any 10 basic command used in UNIX/LINUX with their syntax and example.
5. Explain different types of File permission Indicators and File Access mode used in UNIX.

Trouble Shooting (CCH- 105)

Session: 2018-19

Marks: 30

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

1. (a) What are the two categories of faults?
(b) What are the various ways of fixing the problem of modern failure?
2. Explain some of the memory related errors and their troubleshooting
3. Write note on disk clean up and disk defragmentation.
4. (a) What are the tools to diagnose the problem?
(b) Define fault tolerance?
5. Write short notes on:
 - (a) Copyright
 - (b) Computer virus & Logic bomb
 - (c) Troubleshooting.
 - (d) Soldering
 - (e) Hardware profile & Device manager
