

# **UCCC & SPBCBA & SDHG COLLEGE OF BCA & I.T.**

T.Y.B.C.A. (SEMESTER – 5<sup>th</sup>): 2020-21

## **ASSIGNMENTS**

**Date:** 02-09-2020

### **Instructions for students:**

- 1) Assignments must be self-handwritten with blue ink ball point pen only.
- 2) Write assignments in your notebook/foolscap book.
- 3) The top margin of each assignment page must contain student's full name and signature.
- 4) After completion of assignment writing task on or before due date, Scan/capture photo of each assignment page and prepare a subject wise PDF file.
- 5) Students have to upload/submit subject wise PDF file online using the link provided by the respective subject teacher. The link will be provided later on.
- 6) Last date of online assignment submission i.e., upload on the given link is **02-10-2020**.
- 7) Assignment questions of all subjects are given in this file only.

# **501- PHP & MySQL**

## **ASSIGNMENT – 1**

1. Explain form elements with example.
2. Explain passing variables technique with example.

## **ASSIGNMENT - 2**

1. Explain conditional statements of PHP.
2. Explain types of MySQL tables.

## **ASSIGNMENT – 3**

1. What is array? Explain any five array functions.
2. Explain five MySQL connectivity functions.

## **ASSIGNMENT - 4**

1. Explain different types of selectors and events of jquery.
2. Write script of registration with validation.

# **502- UNIX & Shell Programming**

## **ASSIGNMENT – 1**

1. Explain file system. List all directories and write a note on file system components of unix operating system.
2. Explain the kernel architecture of unix in detail.

## **ASSIGNMENT - 2**

1. Define Filter. List all filters and explain sort and cut filters.
2. Define Editor. Explain vi and sed in detail.

## **ASSIGNMENT – 3**

1. What are the different types of file permissions? How they can be changed?
2. Explain ls and ln command in detail with all its options.

## **ASSIGNMENT - 4**

1. Explain the features of unix operating system.
2. Explain command line interpretation of the shell with example.

# **503- Network Technologies**

## **ASSIGNMENT – 1**

1. Explain Cryptography. Explain types of cryptography in detail with an example.
2. Explain Internet Protocols in detail. Explain TCP with its features and services.

## **ASSIGNMENT - 2**

1. Explain the concept of client and server
2. What is Network? Discuss need, uses, advantages and disadvantages of Network.

## **ASSIGNMENT – 3**

1. What is segment? Explain each fields of TCP segment.
2. Explain the responsibilities of every layer of OSI model.

## **ASSIGNMENT - 4**

1. Explain types of guided media with its applications, advantages and disadvantages.
2. Discuss difference between FTP and UDP.

# **504- Operating System - II**

## **ASSIGNMENT – 1**

1. What is Process? Explain process scheduling in detail.
2. Consider the below table fo processes with their respective CPU burst times, arrival time and the priorities. Draw gantt chart and calculate average waiting time and average turn around time using below algorithms.
  1. First Come First Serve(FCFS) Scheduling
  2. Shortest-Job-First(SJF) Scheduling
  3. Priority Scheduling
  4. Round Robin(RR) Scheduling

Process	Burst time	Proirity	Arrival time
P1	10	3	0
P2	15	2	0
P3	13	1	1
P4	7	2	2
P5	9	3	3

## **ASSIGNMENT - 2**

1. What is critical section problem. Explain semaphore in detail.
2. Explain inter process communication in detail.

### **ASSIGNMENT – 3**

1. What is deadlock? Explain its characteristic in detail.
2. Explain deadlock prevention and avoidance in detail.

### **ASSIGNMENT - 4**

1. Explain paging, segmentation and thrashing in detail.
2. Explain following page replacement algorithms in detail.
  - i. FIFO
  - ii. Optimal page replacement
  - iii. Least recently used

# **505- Asp.Net**

## **ASSIGNMENT – 1**

1. What is MSIL? Explain .Net framework.
2. What is event? Explain page life cycle.

## **ASSIGNMENT - 2**

1. What is master page? Why it is needed? Explain nested master page.
2. Explain validation controls in detail.

## **ASSIGNMENT – 3**

1. Explain grid view, ad rotator and data list controls.
2. What is data binding? Write a code snippet for database connectivity.

## **ASSIGNMENT - 4**

1. What is web service? How to add and use it in asp.net?
2. Explain state management techniques with example.