

BSC - COMPUTER SCIENCE

WEBSITE REFERENCES :-

II SEM BSC

SUBJECTS	WEBSITE REFERENCES
DATA STRUCTURES USING C	<p>Unit 1: Introduction and Overview of Data Structures</p> <p>Types of Data Structures</p> <p>https://www.youtube.com/watch?v=DFpWCI_49i0</p> <p>https://www.youtube.com/watch?v=x7t_-ULoAZM</p> <p>Asymptotic notations</p> <p>https://www.youtube.com/watch?v=aGjL7YXI31Q</p> <p>String Operations</p> <p>https://www.youtube.com/watch?v=-pSyzCWsBA8</p> <p>String Processing</p> <p>https://www.youtube.com/watch?v=Rj1Tcb5RFzU</p> <p>https://www.youtube.com/watch?v=SYeMm5HiJQ0</p> <p>https://www.youtube.com/watch?v=uLZUfgqh-DQ</p> <p>kmp algorithm</p> <p>https://www.youtube.com/watch?v=V5-7GzOfADQ</p> <p>Unit 2: Arrays.</p> <p>Representation of Arrays</p> <p>https://www.youtube.com/watch?v=x7t_-ULoAZM&list=PLLOxZwkBK52Akgqf4oSPOQO9ROWS_9rc&index=2</p> <p>operations on Array.</p> <p>https://www.youtube.com/watch?v=Bnjbun-hiBk</p>

Linear Search

https://www.youtube.com/watch?v=HtubN1qZ4O0&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=22

Binary Search

https://www.youtube.com/watch?v=9Qo5cVZbMhM&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=23

Bubble sort

https://www.youtube.com/watch?v=N35fv1YA_24&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=24

Insertion sort

https://www.youtube.com/watch?v=iVcJLM_bNU0&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=25

selection sort

https://www.youtube.com/watch?v=wXFYcGTEU4c&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=26

Unit 3 - Linked List

Linked List Representation

https://www.youtube.com/watch?v=3hyxc4juJRg&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=3

Linked List operations

Insertion

https://www.youtube.com/watch?v=P9AKKKvPYiE&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=4

Deletion

https://www.youtube.com/watch?v=RyWuK9no5s8&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=5

Doubly Linked list

https://www.youtube.com/watch?v=nZua36vQkkY&list=PLLOxZwkBK52Akqf4oSWPOQO9ROWS_9rc&index=11

https://www.youtube.com/watch?v=JZ8Gba9jnFO&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=12

https://www.youtube.com/watch?v=jbOCCrgdgC4&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=13

Unit 4. - Stack and Queue.

Stack Introduction

https://www.youtube.com/watch?v=DKIXEAZYB7I&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=14

Infix To Postfix Operation In Stack

https://www.youtube.com/watch?v=-OsfrqpmqOI&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=18

https://www.youtube.com/watch?v=GECyceDg2bg&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=19

https://www.youtube.com/watch?v=3wGTlsLnZE4&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=20

Balancing symbols

https://www.youtube.com/watch?v=w4ury3_u_gE&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=21

Queue Implementation Using arrays

https://www.youtube.com/watch?v=O3y6A7Wllao&list=PLLOxZwkBK52Akkgqf4oSWPOQO9ROWS_9rc&index=15

unit 5- Graph & Tree

Graph Terminology

https://www.youtube.com/watch?v=20xf98xWD-0&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=48

<https://www.youtube.com/watch?v=JONnqF->

[oCDo&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=49](#)

Traversing a Graph

[https://www.youtube.com/watch?v=xwIRWdAHMBg&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=50](#)

[https://www.youtube.com/watch?v=cMELxr5hKYU&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=51](#)

Trees

[https://www.youtube.com/watch?v=-LYhq4WZ04s&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=32](#)

Types of Binary Trees

[https://www.youtube.com/watch?v=GuWpr-U82L4&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=33](#)

[https://www.youtube.com/watch?v=QqkHLE1V-XU&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=34](#)

Tree Traversal

[https://www.youtube.com/watch?v=NWjFOr184vg&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=35](#)

construction of an expression tree

[https://www.youtube.com/watch?v=rWEHxMOo-IQ&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=36](#)

Binary tree with Inorder and preorder

[https://www.youtube.com/watch?v=S-I71Mtr2I0&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=37](#)

Binary tree with Inorder and postorder

[https://www.youtube.com/watch?v=sEnDVwYI1w0&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=38](#)

Binary search Tree an its operations

[https://www.youtube.com/watch?v=DU5g_dEbSyQ&list=PLLOxZwkBK52Akgqf4oSWPOQO9ROWS_9rc&index=39](#)

construction and Insertion of an element in BST

	<p>https://www.youtube.com/watch?v=SUFSdhiEVl0&list=PLLOxZwkBK52Akqgf4oSWPOQO9ROWS_9rc&index=40</p> <p>deletion of an element In Binary Search Tree</p> <p>https://www.youtube.com/watch?v=-WUbbRxdL8&list=PLLOxZwkBK52Akqgf4oSWPOQO9ROWS_9rc&index=41</p> <p>searching an element in a Binary search Tree</p> <p>https://www.youtube.com/watch?v=LBIEINC0d1A&list=PLLOxZwkBK52Akqgf4oS WPOQO9ROWS_9rc&index=42</p>
--	--

IV SEM BSC

SUBJECTS	WEBSITE REFERENCES
UNIX & OS	<ol style="list-style-type: none"> 1. Introduction to UNIX http://www.ee.surrey.ac.uk/Teaching/Unix/unixintro.html https://www.youtube.com/watch?v=vLPdBp9vv9Y 2. UNIX Architecture https://www.youtube.com/watch?v=o9c1_hpWLe0 https://www.youtube.com/watch?v=e27NvCgUA8c 3. UNIX File System http://www.cis.rit.edu/class/simg211/unixintro/Filesystem.html 4. Commands in UNIX https://www.youtube.com/watch?v=3DA1grSp4mU 5. <i>UNIX Process Management</i> https://www.slideshare.net/wavedigitech/unix-process-management 6. UNIX Tools and Utilities http://www.cs.toronto.edu/~maclean/csc209/unixtools.html

7. Shell Programming

https://homepages.uc.edu/~thomam/Intro_Unix_Text/Shell_Prog.html

8. Control Structures

<http://litux.nl/Reference/books/7213/ddu0071.html>

9. UNIX System Communication

<https://www.youtube.com/watch?v=nzmhOFhuSE4>

10. UNIX System Administration

http://www.sci.brooklyn.cuny.edu/~firat/unix_essential_tasks_of_system_administration.php

<https://www.tutorialspoint.com/unix/unix-user-administration.htm>

Introduction :

<http://www.youtube.com/watch?v=MzVGL44eq9w>

deadlock :

<http://www.youtube.com/watch?v=ESHBbl0bYBU>

<http://www.youtube.com/watch?v=1RpHW9UVVZc>

<http://cs.uttyler.edu/Faculty/Rainwater/COSC3355/Animations/diskschedulingscan.htm>

<http://www.fearme.com/misc/alg/node149.html>

http://www1bpt.bridgeport.edu/sed/projects/cs503/Spring_2001/kode/os/scheduling.htm

<http://www.youtube.com/watch?v=oIXj9FfSyxY>

<http://www.youtube.com/watch?v=-Ypa8Uwf5YA>

<http://labprograms.wordpress.com/2009/07/24/cpu-scheduling-algorithms-fcfs-sjf-and-round-robin/>

http://www1bpt.bridgeport.edu/sed/projects/cs503/Spring_2001/kode/os/scheduling.htm

	<p>http://www.cis.upenn.edu/~lee/07cis505/Lec/os-schedule-v2.pdf</p> <p>http://www.planet-source-code.com/vb/scripts/ShowCode.asp?txtCodeId=11821&lngWId=3</p>
--	---

VI SEM BSC

SUBJECTS	WEBSITE REFERENCES
CN	<p style="text-align: center;">Unit - I</p> <p>Introduction:</p> <p>https://www.youtube.com/watch?v=VwN91x5i25g&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=2&t=0s</p> <p>https://www.youtube.com/watch?v=m8eNwVel5xI&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=2</p> <p>https://www.youtube.com/watch?v=EBTP0mpCGBM&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=6&t=0s</p> <p>Transmission Media: Copper wires, glass fibers, radio, satellite, Geosynchronous satellites, low earth orbit satellites, Low earth orbit satellite arrays, Microwave, Infrared, Light from a laser.</p> <p>https://www.youtube.com/watch?v=ERmsUkNR6Ho&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=4&t=0s</p> <p>https://www.youtube.com/watch?v=LY39KdQ9X8I&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=4</p> <p>Baud rate</p> <p>https://www.youtube.com/watch?v=-VE-a52Z6dw</p> <p>Framing and errors</p> <p>https://www.youtube.com/watch?v=NhpzBldHOYo</p> <p>Half and Full duplex asynchronous communication,</p> <p>https://www.youtube.com/watch?v=F9HalGTc5uM</p> <p>Baseband and broadband technologies,</p> <p>https://www.youtube.com/watch?v=Dt7rI5bBKQs</p> <p>Wave length division multiplexing,</p> <p>https://www.youtube.com/watch?v=n0xyR6PS3Os&list=PLWPirh4EWFpHJrW1D9UB24wsbM3zx7QMx&index=34&t=0s</p> <p>Time division multiplexing</p> <p>https://www.youtube.com/watch?v=1rkdtZCcV-k&list=PLWPirh4EWFpHJrW1D9UB24wsbM3zx7QMx&index=34</p> <p>https://www.youtube.com/watch?v=kcPgzi75RF0&list=PLWPirh4EWFpHJ</p>

[rW1D9UB24wsbM3zx7QMx&index=35](#)

UNIT II

Concept of Packets, packets and Time-division Multiplexing, Packets and Hardware Frames, byte Stuffing

<https://www.youtube.com/watch?v=NhpzBldHOYo&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=36>

https://www.youtube.com/watch?v=8sV_fOzJoqI&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=38

https://www.youtube.com/watch?v=e6AfN_JO12I&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=40

Error detection, Detecting errors with checksums, detecting errors with CRC, Burst errors, frame formats and error detection mechanism

<https://www.youtube.com/watch?v=EMrY-8m8D1E&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=44>

<https://www.youtube.com/watch?v=AtVWnyDDaDI&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=47>

<https://www.youtube.com/watch?v=A9g6rTMBz4&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=48>

<https://www.youtube.com/watch?v=wQGwfBS3gpk&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=49>

<https://www.youtube.com/watch?v=tEkePtlujSA&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=50>

Network Topologies: Direct point-to-point communications, Shared Communications channels, LAN Topologies

<https://www.youtube.com/watch?v=uSKdjjw5zow&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=7>

Ethernet, Carries sense on CSMA, Collision Detection and Backoff with CSMA/CD

https://www.youtube.com/watch?v=KDHbP81SAMA&feature=emb_logo
https://www.youtube.com/watch?v=BtkPrr9Ff-M&feature=emb_logo

ATM

https://www.youtube.com/watch?v=IPuLZSOye4c&feature=emb_logo

Physical addresses, broadcasting, Multicast addressing

<https://www.youtube.com/watch?v=hffYt7RDrgk>

<https://www.youtube.com/watch?v=fRiOOWJDcK8>

Network Interface Hardware - Network interface cards and wiring schemes

<https://www.youtube.com/watch?v=0ZJ8pF-QNJU>

<https://www.youtube.com/watch?v=ZrAs-4pJjm>

https://www.youtube.com/watch?v=778rS_FMb10

UNIT III

Repeaters, bridges, frame filtering, switching

https://www.youtube.com/watch?v=0pMm_QxCg3I&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=28

https://www.youtube.com/watch?v=-WhBOnH_jB8&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=29

SONET

https://www.youtube.com/watch?v=f6-G7gMwpwu&feature=emb_logo

WAN technologies and Routing: Large Networks and Wide Areas, Packet switches, forming a WAN, store and forward, Physical addressing in a WAN, Next-Hop forwarding, Source independence, Routing Table Computation, Example of WAN technologies.

https://www.youtube.com/watch?time_continue=4&v=AmlOSGYkKXc&feature=emb_logo

Shortest path computation in a Graph

<https://www.youtube.com/watch?v=WN3Rb9wVYDY>

<https://www.youtube.com/watch?v=Lfb8qkXzHY0>

Distance vector routing

<https://www.youtube.com/watch?v=-AyHRhaw4Ao>

Link-state routing

<https://www.youtube.com/watch?v=dINbkxHY4U>

Network ownership, Network performance characteristics, Jitter

<https://www.youtube.com/watch?v=5AVuUgEJu1E&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=51>

<https://www.youtube.com/watch?v=vPCKWhXSAAe&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=54>

OSI layer model

https://www.youtube.com/watch?v=vv4y_uOneC0

<https://www.youtube.com/watch?v=qBXmbJZQ5rY&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=14>

<https://www.youtube.com/watch?v=xiGgrQioF2E&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=15>

<https://www.youtube.com/watch?v=oQzueBVyAM4&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=16>

<https://www.youtube.com/watch?v=XI8kMBMMS6o&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=17>

Unit - IV

Internetworking: internet architecture, A virtual Network

<https://www.youtube.com/watch?v=qrG0bS-JuTo>

	<p>https://www.youtube.com/watch?v=xwaqSZHK8eM&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=24</p> <p>Internet Protocol Addresses</p> <p>https://www.youtube.com/watch?v=L1h7peiCT30&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=47</p> <p>https://www.youtube.com/watch?v=i5fqDXLzH8&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=48</p> <p>https://www.youtube.com/watch?v=sDy_Cx06J60&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=49</p> <p>APR</p> <p>https://www.youtube.com/watch?v=5dzpiq9ZKDo&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=65</p> <p>IP Datagram's and Datagram Forwarding, Fragmentation and Reassembly</p> <p>https://www.youtube.com/watch?v=-KRmts0J0Hk&list=PLFLIgriuZPAcCkmSTfcq7oaHcVy3rzEtc&index=23</p> <p>https://www.youtube.com/watch?v=-KRmts0J0Hk&t=242s</p> <p>IPv6</p> <p>https://www.youtube.com/watch?v=uzLvGsxVJV0&list=PLftJ4X48yC1kLT_b-qf_XOm9dBvPohZA&index=53</p> <p>ICMP</p> <p>https://www.youtube.com/watch?v=yPrxbc0WcGM&list=PLFLIgriuZPAcCkmSTfcq7oaHcVy3rzEtc&index=25</p> <p>UDP</p> <p>https://www.youtube.com/watch?v=O22zHLcHHN0</p> <p>TCP</p> <p>https://www.youtube.com/watch?v=wvPe4Zb0tUA&list=PLBlnK6fEyqRgMCUAG0XRw78UA8qnv6jEx&index=20&t=0s</p> <p>Internet routing</p> <p>https://www.youtube.com/watch?v=8qtKpZGoNdI&t=3s</p> <p>DNS</p> <p>https://www.youtube.com/watch?v=tBuoqbEEtZc&list=PLWPirh4EWFpHJrW1D9UB24wsbM3zx7QMx&index=101&t=0s</p> <p>MAIL</p> <p>https://www.youtube.com/watch?v=6jKGSthvIjY&list=PLWPirh4EWFpHJrW1D9UB24wsbM3zx7QMx&index=101</p>
--	---

<h2>WEB PROGRAMMING</h2>	<p style="text-align: center;"><u>Unit -1</u></p> <ol style="list-style-type: none"> https://www.geeksforgeeks.org/difference-between-web-browser-and-web-server/ https://www.youtube.com/watch?v=eesqK59rhGA https://www.w3schools.com/html/html_xhtml.asp https://www.youtube.com/watch?v=OTQqSOmy4U https://www.learn-html.org/en/Basic_Elements https://www.youtube.com/watch?v=dmovVa0jseU <p style="text-align: center;"><u>Unit -2</u></p> <ol style="list-style-type: none"> https://www.w3schools.com/tags/tag_form.asp https://www.youtube.com/watch?v=fNcJuPIZ2WE
--------------------------	---

- | | |
|--|--|
| | <ol style="list-style-type: none"> 2. https://www.w3schools.com/css/default.asp 3. https://www.youtube.com/watch?v=yfoY53QXEnl 4. http://cs.loc.edu/~chu/ITEC305/ch3/style_format.html 5. https://www.youtube.com/watch?v=O_WdaMxilpc 6. https://www.javatpoint.com/css-selector 7. selector forms in css 8. https://www.geeksforgeeks.org/span-tag-html/ |
|--|--|

Unit -3

1. https://www.w3schools.com/js/js_operators.asp
2. [operators in javascript](#)
3. https://www.w3schools.com/jsref/met_win_prompt.asp
4. <https://www.youtube.com/watch?v=fu1x3Czt6Mo>
5. https://www.w3schools.com/js/js_regexp.asp
6. https://www.youtube.com/watch?v=W7S_Vmq0GSS

Unit -4

1. https://www.w3schools.com/js/js_htmldom.asp
2. <https://www.youtube.com/watch?v=XD7fYLQeQlg>
3. https://www.w3schools.com/js/js_htmldom_elements.asp
4. <https://www.youtube.com/watch?v=zn5YYoGUTjQ>
5. https://www.w3schools.com/jsref/dom_obj_event.asp
6. <https://www.youtube.com/watch?v=622BbW9AoBQ>

Unit -5

1. https://docstore.mik.ua/oreilly/webprog/javascript/ch18_02.htm
2. <https://www.youtube.com/watch?v=oRbLowjKVzl>
3. http://cs.loc.edu/~chu/ITEC315/ch6/stacking_ele.html
4. <https://www.youtube.com/watch?v=k4taTzkhzHc>
5. https://www.w3schools.com/xml/xml_whatis.asp
6. <https://www.youtube.com/watch?v=k9owEd7es10>
7. https://www.w3schools.com/xml/xsl_intro.asp
8. <https://www.youtube.com/watch?v=BCXK0VeEZTc>