

NAME OF THE SUBJECT: DESIGN AND ANALYSIS OF ALGORITHMS
SUBJECT CODE: 18CS42

Modules	Topics 1 Hour Each	Ppt's	Video Links	E-Materials	Date And Duration
Module-3 Greedy Method And Transform And Conquer Approach	Greedy Method: General Method [Lecturer 1]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=IXEUEB0djF0&T=485s	https://drive.google.com/drive/u/1/folders/1vhmbcpzl7jcrz6qnvbo5pp9tbyyhwmmd	26th- 27th March, 2020 2 Days
	Coin Change Problem [Lecturer 2]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=IXEUEB0djF0&T=485s		27th- 28th March, 2020 2 Days
	Knapsack Problem And Algorithm [Lecturer 3]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Ottznmhm05i		28th- 30th March, 2020 2 Days
	Job Sequencing With Deadlines With Algorithm [Lecturer 4]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Zpti8q9gvx8		29th- 30th March, 2020 2 Days
	Minimum Cost Spanning Tree:Prims Algorithm With Problems [Lecturer 5]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=5m7boxrn54a https://www.youtube.com/watch?v=4zlrh0ek-Qq&T=882s		30th- 31th March, 2020 2 Days
	Kruskals Algorithm With Problems [Lecturer 6]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Ivcbaihrcse https://www.youtube.com/watch?v=		1th- 2th April, 2020 2 Days

			4zlrh0ek-Qq&T=882s		
	Single Source Shortest Paths(Dijkstra's Algorithm)With Problems [Lecturer 7]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=XB4MIexjvY0&T=783s		2th- 3th April, 2020 2 Day
	Optimal Tree Problem :Huffman Tress And Codes [Lecturer 8]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Co4_Ahedcho https://www.youtube.com/watch?v=Hhic5jzyeni		3th- 4th April, 2020 2 Day
	Transform And Conquer Approach Heap And Heapsort [Lecturer 9]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Hqjpf2l5h9u		4th- 5th April, 2020 2 Days
	Heap Sort - Insertion, Deletion And Construction [Lecturer 10]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=Hqjpf2l5h9u		5th- 6th April, 2020 2 Days
Modules	Topics 1 Hour Each	Ppt's	Video Links	E-Materials	Date And Duration
	General method with Examples, [Lecturer 1]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=5dRGRueKU3M&t=587s		6th- 7th April, 2020 2 Day
	Multistage Graphs [Lecturer 2]	Will Be Mailed To	https://www.youtube.com/watch?v=9iE9Mj4m8jk&t=13s		7th- 8th April, 2020 2 Day

Module-4 Dynamic Programming		Group Id		https://drive.google.com/drive/u/1/folders/1vhmbcpzl7jcrz6qnvbo5pp9byyhwmmd	
	Transitive Closure: Warshall's Algorithm[Lecturer 3]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=oNI0rf2P9gE		8th- 9th April, 2020 2 Day
	All Pairs Shortest Paths: Floyd's Algorithm[Lecturer 4]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=oNI0rf2P9gE		9th- 10th April, 2020 2 Day
	Optimal Binary Search Trees[Lecturer 5]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=vLS-zRCHo-Y		10th- 11th April, 2020 2 Day
	Knapsack problem [Lecturer 6]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=nLmhmB6NzcM&t=1274s		11th- 12th April, 2020 2 Days
	Bellman-Ford Algorithm[Lecturer 7]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=FtN3BYH2Zes&t=619s		12th- 13th April, 2020 2 Day
	Bellman-Ford Problems [Lecturer 8]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=FtN3BYH2Zes&t=619s		12th- 13th April, 2020 2 Day
	Travelling Sales Person problem [Lecturer 9]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=XaXsJJh-Q5Y&t=4s		13th- 14 th April, 2020 2 Days
	Reliability design [Lecturer 10]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=uJomqBwENB8&t=818s		13th- 14 th April, 2020 2 Days
Modules	Topics 1 Hour Each	Ppt's	Video Links	E-Materials	Date And Duration
	Backtracking:		https://www.youtube.com/watch?v=DK		15th– 16th

Module-5 Backtracking	General method [Lecturer 1]	Will Be Mailed To Group Id	CbsiDBN6c	https://Drive.Google.Com/Drive/U/1/Folders/1vhmbcpzl7jcrz6qnvbo5pp9byyhwmmd	April, 2020 1 Day
	N-Queens problem[Lecturer 2]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=xFvHI4B83A&t=730s		16th- 17th April, 2020 1 Day
	Sum of subsets problem [Lecturer 3]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=kyLxTdsT8ws&t=537s		17th- 18th April, 2020 1 Day
	Graph coloring[Lecturer 4]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=052VkKhIaQ4		18th- 19th April, 2020 1 Day
	Hamiltonian cycles[Lecturer 5]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=dQr4wZCiJJ4		19th- 20th April, 2020 1 Day
	Branch and Bound: Assignment Problem [Lecturer 6]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=3RBNPc0_Q6g&t=9s		20th- 21th April, 2020 1 Days
	Travelling Sales Person problem [Lecturer 7]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=1FEP_sNb62k&t=3s		21th- 22th April, 2020 1 Day
	0/1 Knapsack problem [Lecturer 8]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=zuq958SaxUA		22th- 23th April, 2020 1 Day
	LC Branch and Bound solution FIFO Branch and Bound solution [Lecturer 9]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=3RBNPc0_Q6g&t=20s		23th- 24 th April, 2020 1 Days

	NP-Complete and NP-Hard problems [Lecturer 10]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=e2cF8a5aAhE	24th- 25 th April, 2020 1 Days
Modules	Topics 1 Hour Each	Ppt's	Video Links and E-materials	Date and Duration
Module-5 Backtracking (continued)	Branch and Bound: Assignment Problem [Lecturer 11]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=3RBNPc0_Q6g&t=9s	4/5/20 1 day
	Travelling Sales Person problem [Lecturer 12]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=1FEP_sNb62k&t=3s	5/5/20 1 day
	0/1 Knapsack problem [Lecturer 13]	Will Be Mailed To Group Id	https://www.youtube.com/watch?v=zuq958SaxUA	6/5/20 1 day
	0/1 Knapsack Problems [Lecturer 14]	Will Be Mailed To Group Id	Will Be Mailed To Group Id	7/5/20 1 day
	Problems on Travelling Salesman	Will Be Mailed To Group Id	Will Be Mailed To Group Id	8/5/20 1 day
Revision on module -5	All problems on module-05 All problems on module-05	Will Be Mailed To Group Id	Review question paper questions Will be mailed to group id Topics(N-queens problem, Sum of Subset problems)	11/5/20 1 day
		Will Be Mailed To Group Id	Review question paper questions Will be mailed to group id Topics(Assignment problem ,Branch and bound problems)	12/5/20 1 day
		Will Be Mailed To Group Id	Review question paper questions Will be mailed to group id Topics(Travelling salesman problem, 0/1 Knapsack problem)	13/5/20 1 day
Revision on module -4	All question paper problems on module-04	Will Be Mailed To Group Id	Review question paper questions Will be mailed to group id Topics(Floyd's and Warshall problems)	14/5/20 1 day
		Will Be Mailed To Group Id	Review question paper questions Will be mailed to group id Topics(bellman ford problems)	15/5/20 1 day

Operating Systems(18CS43)

Modules	Topics[1hr each]	PPT	Video links	E-materials	Date & Duration
Module 2: Multi-threaded Programming, Process Scheduling, Process Synchronization. (50% portion covered)	Lecture 1: Scheduling Algorithms- Priority, Round Robin, Multilevel Queue and Multilevel Feedback queue Scheduling		https://www.youtube.com/watch?v=Vjr16xDgi4s&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=12 (Already done this topic in class) https://www.youtube.com/watch?v=nc6LTW4KfB0&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=13 https://www.youtube.com/watch?v=Z2nxQbJxn7g&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=14	https://drive.google.com/open?id=1j7zdy5thvUXlK0LvjX9caYzrYD1wLK2C	26 th March 2020
	Lecture 2: Multiple-Processor Scheduling, Thread Scheduling		https://www.youtube.com/watch?v=aKjDqOguxjA https://www.youtube.com/watch?v=5e01cL_MLRQ https://www.youtube.com/watch?v=4kfiQEA7Qj8&t=190s	https://drive.google.com/open?id=1iuwO0YqM1Jlz4CS8za7pJ4jdFf_GFBJa	27 th March 2020
	Lecture 3: Process Synchronization, Critical Section Problem, Peterson's Solution		https://www.youtube.com/watch?v=HghFvnROYuw&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=15 https://www.youtube.com/watch?v=JIGcP-JNxXk&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=16 https://www.youtube.com/watch?v=uj-zhs7cUSI		28 th March 2020
	Lecture 4: Synchronization hardware, Semaphores		https://www.youtube.com/watch?v=UN1y6FFXgIg https://www.youtube.com/watch?v=e2ujg5K310s https://www.youtube.com/watch?v=oFhYZ5Y3Pq0 https://www.youtube.com/watch?v=uP9		29 th March 2020

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	Lecture 5: Classical problems of synchronization, Monitors				30 th March 2020
Module 3: Deadlocks, Memory Management	Lecture 1: System model, deadlock characterization, methods for handling deadlocks.	PPT will be shared in Google class	https://www.youtube.com/watch?v=zb2JDY-vNl0&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=25 https://www.youtube.com/watch?v=-VksGXfiK7k&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=26		31 st March 2020
	Lecture 2: Deadlock prevention, avoidance.		https://www.youtube.com/watch?v=sKaaad5GrYc&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=27		1 st April 2020
	Lecture 3: Deadlock detection and recovery from deadlock		https://www.youtube.com/watch?v=2St4eKZ_VVQ&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=31 https://www.youtube.com/watch?v=AGZr5LaiyMg https://www.youtube.com/watch?v=13qjXk63MaM https://www.youtube.com/watch?v=KBFrWu_gejE&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=32		2 nd April 2020

		H9JTKH9KsnfAA471Fhy&index=32 https://www.youtube.com/watch?v=kOYTmxKpIms	
Lecture 4: Memory Management Strategies, Background		https://www.youtube.com/watch?v=UDPYpf-nsDY https://www.youtube.com/watch?v=W0068fRJTGQ	3 rd April 2020
Lecture 5: Swapping, Contiguous memory allocation.		https://www.youtube.com/watch?v=Qt49Hzh_TDc https://www.youtube.com/watch?v=ZN-baY3x85o https://www.youtube.com/watch?v=DjNvM5EXHpA https://www.youtube.com/watch?v=AbxSIVZUn60	4 th April 2020
Lecture 6: Paging		https://www.youtube.com/watch?v=kt4LkPFt8Zg https://www.youtube.com/watch?v=j0IqYWyBAKE https://www.youtube.com/watch?v=R-WgaQQHSPw	5 th April 2020
Lecture 7: Structure of page table		https://www.youtube.com/watch?v=Sa3Z-aFINuE https://www.youtube.com/watch?v=6gX_28Nlazc https://www.youtube.com/watch?v=NyWcVoKjDu4 https://www.youtube.com/watch?v=arIuMrC06fA	6 th April 2020
Lecture 8: Segmentation		https://www.youtube.com/watch?v=xD5PB_g1rIE https://www.youtube.com/watch?v=H7cJsF79iew https://www.youtube.com/watch?v=tL7L1c7rtXg	7 th April 2020

Module 4: Virtual Memory Management:	Lecture 1: Background	PPT will be shared in Google class	https://www.youtube.com/watch?v=uj0J7J_19cY&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=49 https://www.youtube.com/watch?v=qn8ohZXjW6M https://www.youtube.com/watch?v=NPhcwfnYZd8 https://www.youtube.com/watch?v=qlH4-oHnBb8	8 th April 2020
	Lecture 2: Demand paging; Copy-on-write, Page replacement.		https://www.youtube.com/watch?v=aOz3YMfEo1o&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=22 https://www.youtube.com/watch?v=k2mruDltkWc&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=23 https://www.youtube.com/watch?v=2YbZD3GHwIU&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=24 https://www.youtube.com/watch?v=0Bs qjo5iaUI https://www.youtube.com/watch?v=lgmws9oraXE&list=PLWPirh4EWFpGkHH9JTKH9KsnfAA471Fhy&index=50 https://www.youtube.com/watch?v=6VOYx3-JOnM https://www.youtube.com/watch?v=16kaPQtYo28 https://www.youtube.com/watch?v=u23ROrISK_g https://www.youtube.com/watch?v=jeJIKKQcqpU&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=28	9 th -11 th April 2020 3 Days

	Lecture 3: Allocation of frames Thrashing.	https://www.youtube.com/watch?v=B5i-IAuYO6g https://www.youtube.com/watch?v=mJIDC-u8JU&t=2s https://www.youtube.com/watch?v=j2QujhrwLYA&list=PLWPirh4EWFpGkH9JTKH9KsnfAA471Fhy&index=58&pbjreload=10 https://www.youtube.com/watch?v=0Tg88zYHh4Y&list=RDCMUC4EX8zLiBUalk704IX_zu1Q&start_radio=1&t=13	13 th -14 th April 2020 2 Days
	Lecture 4: File System, Implementation of File System File system: File concept;	https://www.youtube.com/watch?v=0vno0Ra0wEg	16 th April 2020 1 Day
	Lecture 5: Access methods, Directory structure.	https://www.youtube.com/watch?v=eK_mEHG20PA	18 th April 2020 1 Day
	Lecture 6: File system mounting, File sharing.	https://www.youtube.com/watch?v=QT1mBAJBuoA https://www.youtube.com/watch?v=amEqusuNYQM	20 th April 2020 1 Day
	Lecture 7: Protection: Implementing File system, File system structure File system implementation	https://www.youtube.com/watch?v=yzWQ3_5ttmE https://www.youtube.com/watch?v=t8Rs9AbqHUc	21 st April 2020 1 Day
	Lecture 8: Directory implementation; Allocation methods,	https://www.youtube.com/watch?v=-KKj3WF1MFM https://www.youtube.com/watch?v=gK6L3v1b8AM	23 rd April 2020 1 Day

	Free space management		https://www.youtube.com/watch?v=hDBFSQRHPAU&t=2s		
Module 5: Secondary Storage Structures, Protection	Lecture 1: Mass storage structures, Disk Structure.		https://www.youtube.com/watch?v=OHJ9NT8aPcA https://www.youtube.com/watch?v=cUEpi_Oy8QI		25 th April 2020 1 Day
	Lecture 2: Disk attachment; Disk scheduling, Disk management.		https://www.youtube.com/watch?v=ZjMwUhapSEM&t=67s https://www.youtube.com/watch?v=Qow06ontwuc&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=70 https://www.youtube.com/watch?v=ZjMwUhapSEM&t=67s		27 th April 2020 1 Day
	Lecture 3: Swap space Management, Protection: Goals of protection.	PPT will be share d in Googl e class	https://www.youtube.com/watch?v=f3F4-oxjGNQ&list=PLrjkTql3jnm9U1tSPnPWQGIGNkUwBFv-&index=69 https://www.youtube.com/watch?v=Iz-Zw8GNxww&list=PL9P1J9q3_9fOTGzsBCn0T2T5vHLdBcDq_&index=32 https://www.youtube.com/watch?v=O_WbprDZMDw		28 th April 2020 1 Days
	Lecture 4: Principles of protection, Domain of protection, Access matrix,		https://www.youtube.com/watch?v=uFIZD1k5S5U https://www.youtube.com/watch?v=uFIZD1k5S5U&list=PLV8vIYTIIdSnZ67NQObdXE0gFjrPrNKHp&index=42 https://www.youtube.com/watch?v=2YIhzk7tJI8&list=PLV8vIYTIIdSnZ67NQObdXE0gFjrPrNKHp&index=43		4 th - 5 th May 2020 2 Days
	Lecture 5: Implementation of access matrix, Access control, Revocation of access		https://www.youtube.com/watch?v=HHC1jpdxuWM&t=3s https://www.youtube.com/watch?v=2QTFiQVdrgg https://www.youtube.com/watch?v=OP		7 th & 9 th May 2020 2 Day

	rights,		mm0NYYVP4		
	Lecture 6: Capability- Based systems. Case Study: The Linux Operating System		https://www.youtube.com/watch?v=TTBkc5eiju4		11 th May 2020 1 Day
	Lecture 7: Linux history; Design principles; Kernel modules, Process management		https://www.youtube.com/watch?v=-O6GsmOUgY https://www.youtube.com/watch?v=o768iZKtzBA https://www.youtube.com/watch?v=elzvHG6M-eU		12 th May 2020 1 Day
	Lecture 8: Scheduling; Memory Management, File systems, Input and output; Inter-process communication.		https://www.youtube.com/watch?v=JhmoI9nTet4 https://www.youtube.com/watch?v=UDPYpf-nsDY&t=49s https://www.youtube.com/watch?v=Gg8yOzP8ENY https://www.youtube.com/watch?v=fSMVWmGPqIM https://www.youtube.com/watch?v=Sa2-yABWEC4		14 th & 16 th May 2020 2 Day
Module 2	Revision Module 2 by giving questions to solve			https://drive.google.com/open?id=1j7zdy5thvUXIK0LyjX9caYzrYD1wLK2C	18 th May 2020
Module 3	Revision Module 3 by giving questions to solve				19 th May 2020
Module 4	Revision Module 4 by giving questions to solve				25 th May 2020
Module 5	Revision Module 5 by giving questions to solve			https://drive.google.com/open?id=1iuwO0YqM1Jlz4CS8zA7pJ4jdFf_GFBJa	26 th May 2020
Module 4 & Module 5	Revision on Demand paging; Copy-on-write, Page replacement, Allocation of frames Thrashing.				1 st June 2020
	Revision on File System,				2 nd June 2020

	<p>Implementation of File System File system: File Concept, Access methods, Directory Structure, File system mounting, File sharing.</p>				
	<p>Revision on Protection: Implementing File system, File system structure File system implementation, Directory implementation; Allocation methods, Free space management</p>				<p>4th June 2020</p>
	<p>Revision on Mass storage structures, Disk Structure, Disk attachment; Disk scheduling, Disk management, Swap space Management, Protection: Goals of protection.</p>				<p>6th June 2020</p>
	<p>Revision on Principles of protection, Domain of protection, Access matrix, Implementation of access matrix, Access control, Revocation of access rights, Capability-Based systems. Case Study:</p>				<p>8th June 2020</p>

The Linux Operating System				
Revision on Linux history; Design principles; Kernel, Scheduling; Memory Management, File systems, Input and output; Inter-process communication.				9 th June 2020

18CS44 – Microcontrollers and Embedded Systems

18CS44 – Microcontrollers and Embedded Systems					
Module	Topics [1 Hr Each]	PPT	Video Links	E - Materials	Date and Duration
	Embedded Vs General computing system, History of embedded systems [Lecture 1]		https://www.youtube.com/watch?v=17VCuvKZNAA https://www.youtube.com/watch?v=1hX4urTFXr0		26th – 27th March, 2020 2 days
	Classification of Embedded systems, Major applications areas of embedded systems [Lecture 2]		https://www.youtube.com/watch?v=FUWnYHBGw1o&v1=en		27th - 28th March, 2020 2 days
	purpose of embedded systems Core of an Embedded System including all types of processor/controller [Lecture 3]		https://www.youtube.com/watch?v=vXDQPvWGjEI https://slideplayer.com/slide/7316544/		28th - 29th March, 2020 2 days
	Memory, Sensors, Actuators, LED [Lecture 4]		https://www.instructables.com/id/Arduino-Sensors-and-Actuators/		29th - 30th March, 2020

Module 3: Embedded System Components					2 days
	7 segment LED display, stepper motor, Keyboard [Lecture 5]		https://www.youtube.com/watch?v=ZrYyVWv4Ff8 https://www.youtube.com/watch?v=qr4Ca_uRYGA		30th - 31st March, 2020 2 days
	Push button switch, Communication Interface (onboard and external types) [Lecture 6]		https://openlabpro.com/guide/push-button-interfacing-at89s51/		31st - 1nd April 2020 2 days
	Embedded firmware [Lecture 7]		https://www.coursera.org/lecture/introduction-embedded-systems/3-embedded-software-engineering-IGCwA		1nd - 2rd April 2020 2 days
	Other system components [Lecture 8]		https://www.coursera.org/lecture/introduction-embedded-systems/3-embedded-software-engineering-IGCwA		2rd - 3th April 2020 2 days
Module	Topics [1 Hr Each]	PPT	Video Links	E - Materials	Date and Duration
	Characteristics and Quality Attributes of Embedded Systems [Lecture 9]		https://www.youtube.com/watch?v=NMjWnaFxE2s https://slideplayer.com/slide/7889193/ https://www.youtube.com/watch?v=v7yRtIEbyBQ		4th – 5th April, 2020 2 days
	Operational quality attributes [Lecture 10]		https://www.youtube.com/watch?v=m5QqveDXeXI https://www.youtube.com/watch?v=NMjWnaFxE2s https://www.youtube.com/watch?v=uBLGZkSt5Ss		5th – 6th April, 2020 2 days
	non-operational quality attributes [Lecture 11]		https://www.youtube.com/watch?v=VvJLTENUshA		6th – 7th April, 2020 2 days
	Embedded Systems-Application and Domain specific [Lecture 12]		https://www.youtube.com/watch?v=tj3GmD2cXHW https://www.youtube.com/watch?v=I4QdXIU1eTY https://slideplayer.com/slide/8857004/		7th – 8th April, 2020 2 days

Module 4: Embedded System Design Concepts	Hardware Software Co-Design [Lecture 13]		https://www.youtube.com/watch?v=lgjUZFdUn-o https://www.youtube.com/watch?v=EOUPsDOYGq8 https://www.youtube.com/watch?v=srYpyiurvT0		8th – 9th April, 2020 2 days
	Program Modelling [Lecture 14]		https://slideplayer.com/slide/5327575/ https://swayam.gov.in/nd1_noc20_cs14/preview		9th – 10th April, 2020 2 days
	embedded firmware design [Lecture 15]		https://www.youtube.com/watch?v=oeHPMNiqlwo https://www.softeq.com/embedded_system		10th – 11th April, 2020 2 days
	Development [Lecture 16]		https://fr.coursera.org/lecture/introduction-embedded-systems/2-introduction-to-embedded-systems-5z2IZ		11th – 12th April, 2020 2 days
Module	Topics [1 Hr Each]	PPT	Video Links	E - Materials	Date and Duration
	Operating System basics, Types of operating systems [Lecture 17]		https://www.youtube.com/watch?v=Oe9WzYjKYQg https://www.youtube.com/watch?v=ECEvUEkSSLg https://www.youtube.com/watch?v=On3p6zZBG0E https://www.youtube.com/watch?v=8v8EKpcvVyo		17th – 18th April, 2020 2 days
	Task, process and threads (Only POSIX Threads with an example program), Thread preemption [Lecture 18]		https://www.youtube.com/watch?v=RZGjMKysP-0 https://www.youtube.com/watch?v=O3EyzlZxx3g https://www.youtube.com/watch?v=ZPqLdD53jlk https://www.youtube.com/watch?v=Dhf-DYO1K78 https://study.com/academy/lesson/preemptive-vs-non-preemptive-process-scheduling.html		20th – 21st April, 2020 2 days
	Multiprocessing and Multitasking, Task Communication (without any program) [Lecture 19]		https://www.youtube.com/watch?v=AzKdcMeu9Zg https://www.youtube.com/watch?v=OWhD60KxngU https://www.youtube.com/watch?v=PY6zEUELn8s https://www.youtube.com/watch?v=a-iPhMxHB2s		21st – 22nd April, 2020 2 days

Module 5: RTOS and IDE for Embedded System Design	Task synchronization issues – Racing and Deadlock, Concept of Binary and counting semaphores (Mutex example without any program) [Lecture 20]		https://study.com/academy/lesson/process-synchronization-in-operating-systems-definition-mechanisms.html https://www.youtube.com/watch?v=C11oPTm4K84 https://www.youtube.com/watch?v=XEb3CkuTdss https://www.youtube.com/watch?v=2EznkxOM4eQ https://www.youtube.com/watch?v=SsBgNFEpfFE		23rd – 24th April, 2020 2 days
	How to choose an RTOS, Integration and testing of Embedded hardware and firmware [Lecture 21]		https://www.youtube.com/watch?v=bOFMXuoc5kE https://barrgroup.com/webinar/how-prioritize-rtos-tasks-and-why-it-matters		27th – 28th April, 2020 2 days
	Embedded system Development Environment – Block diagram (excluding Keil) [Lecture 22]		https://www.youtube.com/watch?v=QODSR2-mPn8 https://extension.ucsd.edu/courses-and-programs/embedded-real-time-operating-system-rtos https://microcontrollerslab.com/main-embedded-system-development-tools/		28th – 29th April, 2020 2 days
	Disassembler/decompiler, simulator, emulator and debugging techniques [Lecture 23]		https://www.youtube.com/watch?v=4wmDsd53ibE https://www.embeddedrelated.com/thread/2781/rtos-debugging-techniques		30th – 1st May, 2020 2 days
	target hardware debugging, boundary scan [Lecture 24]		https://www.youtube.com/watch?v=wDk6TDm4rYk		1st – 2nd May, 2020 2 days

REVISION OF MODULE 3 AND 4:

Module	Topics [1 Hr Each]	PPT	Video Links	E - Materials	Date and Duration
	Disassembler/decompile, simulator, emulator and debugging techniques [Lecture 23]		https://www.youtube.com/watch?v=4wmDsd53ibE https://www.embeddedrelated.com/thread/2781/rtos-debugging-techniques		4th – 5th May, 2020 2 days

Module 3: Embedded System Components Module 4: Embedded System Design Concepts	target hardware debugging, boundary scan [Lecture 24]	https://www.youtube.com/watch?v=wDk6TDm4rYk	5th – 6th May, 2020 2 days
	Revision of[Lecture 1] Embedded Vs General computing system, History of embedded systems	https://www.youtube.com/watch?v=17VCuvKZNA https://www.youtube.com/watch?v=1hX4urTFXr0	7th – 8th May, 2020 2 days
	Revision of[Lecture 2] Classification of Embedded systems, Major applications areas of embedded systems	https://www.youtube.com/watch?v=FUWnYHBGw1o&v1=en	8th – 9th May, 2020 2 days
	Revision of[Lecture 3] purpose of embedded systems Core of an Embedded System including all types of processor/controller	https://www.youtube.com/watch?v=vXDQPvWGjEI https://slideplayer.com/slide/7316544/	11th – 12th May, 2020 2 days
	Revision of[Lecture 4] Memory, Sensors, Actuators, LED	https://www.instructables.com/id/Arduino-Sensors-and-Actuators/	12th – 13th May, 2020 2 days
	Revision of[Lecture 5] 7 segment LED display, stepper motor, Keyboard	https://www.youtube.com/watch?v=ZrYyVWv4Ff8 https://www.youtube.com/watch?v=qr4Ca_uRYGA	14th – 15th May, 2020 2 days
	Revision of[Lecture 6] Push button switch, Communication Interface (onboard and external types)	https://openlabpro.com/guide/push-button-interfacing-at89s51/	15th – 16th May, 2020 2 days
Embedded firmware Revision of [Lecture 7]	https://www.coursera.org/lecture/introduction-embedded-systems/3-embedded-software-engineering-IGCwA	19th – 20th May, 2020 2 days	
Other system components Revision of [Lecture 8]	https://www.youtube.com/watch?v=NMjWnaFxE2s	26th – 27th May, 2020	

					2 days
	Characteristics and Quality Attributes of Embedded Systems Revision of [Lecture 9]		https://www.youtube.com/watch?v=NMjWnaFxE2s		28th – 29th May, 2020 2 days
	Operational attributes Revision of [Lecture 10]	quality	https://slideplayer.com/slide/7889193/ https://www.youtube.com/watch?v=v7yRtIEbyBQ https://www.youtube.com/watch?v=m5QqveDXeXI https://www.youtube.com/watch?v=NMjWnaFxE2s https://www.youtube.com/watch?v=uBLGZkSt5Ss		29th – 30th May, 2020 2 days

REVISION OF MODULE 5:

Module	Topics [1 Hr Each]	PPT	Video Links	E - Materials	Date and Duration
Module 5: RTOS and IDE for Embedded System Design	non-operational quality attributes Revision of [Lecture 11]		https://www.youtube.com/watch?v=VvJLTENUsHA		01st – 02nd June, 2020 2 days
	Embedded Systems-Application and Domain specific Revision of [Lecture 12]		https://www.youtube.com/watch?v=tj3GmD2cXHw https://www.youtube.com/watch?v=I4QdXIU1eTY https://slideplayer.com/slide/8857004/		02nd – 03rd June, 2020 2 days
	Hardware Software Co-Design Revision of [Lecture 13]		https://www.youtube.com/watch?v=lgjUZFdUn-o https://www.youtube.com/watch?v=EOUPsDOYGq8 https://www.youtube.com/watch?v=srYpyiurVT0		04th – 05th June, 2020 2 days
	Program Modelling Revision of [Lecture 14]		https://slideplayer.com/slide/5327575/ https://swayam.gov.in/nd1_noc20_cs14/preview		05th – 06th June, 2020 2 days
	embedded firmware design Revision of [Lecture 15]		https://www.youtube.com/watch?v=oeHPMNiqIwo https://www.softeq.com/embedded_system		08th – 09th June, 2020

					2 days
	Development Revision of [Lecture 16]		https://fr.coursera.org/lecture/introduction-embedded-systems/2-introduction-to-embedded-systems-5z2IZ		09th – 10th June, 2020 2 days
	Operating System basics, Types of operating systems Revision of [Lecture 17]		https://www.youtube.com/watch?v=Oe9WzYjKYQg https://www.youtube.com/watch?v=ECEvUEkSSLg https://www.youtube.com/watch?v=On3p6zZBG0E https://www.youtube.com/watch?v=8v8EKpcvVyo		15th – 16th June, 2020 2 days

OBJECT ORIENTED CONCEPTS-18CS45

Modules	Topics [1hr each]	PPT	Video links	E-materials	Date & Duration
MODULE 3					
Module 3: Classes, Inheritance, Exception Handling	Lecture 1: Classes: Classes fundamentals; Declaring objects;		https://www.youtube.com/watch?v=0wGq6yZNN60 (Already done this topic in class)		16 th March 2020
	Lecture 2: Constructors, this keyword, garbage collection.		Constructors- https://www.youtube.com/watch?v=Bh5qETmJgJM this keyword- https://www.youtube.com/watch?v=P5DQzTL3O_w		18 th March 2020
	Lecture 3: inheritance basics		https://www.youtube.com/watch?v=KOOzUclWhfY		19 th March 2020
	Lecture 4: Inheritance: using super		https://www.youtube.com/watch?v=JPeQXT_Ymns https://www.youtube.com/watch?v=hE7kPRraUmA		20 th March 2020
	Lecture 5: creating multi level hierarchy	https://drive.google.com/open?id=1jLoY8MOu4k6ZBC3he_QONiGnJyR22SFr	https://www.youtube.com/watch?v=4X14Xe5mfR0 https://www.youtube.com/watch?v=y6qpkSS15hw	https://drive.google.com/open?id=1kR4xnMDNBF9AiehaTciQeZU_ZcuW91nM	23 rd March 2020
	Lecture 6: method overriding.		https://www.youtube.com/watch?v=neOvVLpy918		26 th March 2020
	Lecture 7: Exception handling: Exception handling in Java		https://www.youtube.com/watch?v=dT4jBkFA-MI https://www.youtube.com/watch?v=W-N2ltgU-X4		27 th March 2020
	Lecture 8: Exception		https://www.youtube.com/watch?v=8WTVLalXtsk&list=PLsyeobzWxl7rS9B2K1		30 th March 2020

	handling in Java(Contd.).		l--VDpCn41gijnV		
MODULE 4					
Module 4: Packages and Interfaces, Multi Threaded Programming	Lecture 1: Packages- Defining package, example	https://drive.google.com/open?id=1ZtEA9Rg4gnzGJl4sQjFs8rFB-dHwZzQf	https://www.youtube.com/watch?v=eEujVn-ZTLE https://www.youtube.com/watch?v=PIDzyefyAmk	Notes will be shared in google classroom	1 st April 2020
	Lecture 2: Access Protection, Example, Importing Packages		https://www.youtube.com/watch?v=nL5nym76j8Q		2 nd April 2020
	Lecture 3: Interfaces: Defining, Implementing interfaces		https://www.youtube.com/watch?v=Ggixn8Q9VuE https://www.youtube.com/watch?v=mCHcdAnXTtc		3 rd April 2020
	Lecture 4: Nested Interfaces, Applying, variables Interfaces		https://www.youtube.com/watch?v=B7tNX_uzt2U https://www.youtube.com/watch?v=vkht5V11ahg		8 th April 2020
	Lecture 5: Multithreaded programming: threads		https://www.youtube.com/watch?v=Yk7BXaotJ24 https://www.youtube.com/watch?v=TCd8QIS-2KI		9 th April 2020
	Lecture 6: Extending threads		https://www.youtube.com/watch?v=0ySznjdXMEA		13 th April 2020
	Lecture 7: Synchronization: Changing state of the thread		https://www.youtube.com/watch?v=yKmkYE4QDrM https://www.youtube.com/watch?v=QLD2xpI ZYpk		15 th April 2020
	Lecture 8:		https://www.youtube.com/watch?v=YS6a		16 th April 2020

	Bounded buffer problems, producer consumer problems		Qgk8Sg0 producer consumer problems: https://www.youtube.com/watch?v=8o4PSFaYhXo		
MODULE 5					
Module 5: Event Handling, Swings	Lecture 1: Two event handling mechanisms; The delegation event model;	https://drive.google.com/open?id=1z-Sfz_t0qqiLNpgZNGyME11DJRN2j0j8	https://www.youtube.com/watch?v=DNmXTT-hZBM	Notes will be mailed	17 th April 2020
	Lecture 2: Event classes, Sources of events;		https://www.youtube.com/watch?v=_CRhl54tnYM		20 th April 2020
	Lecture 3: Event listener interfaces, Using the delegation event model;		https://www.youtube.com/watch?v=oNmzYTXgaal		22 nd April 2020
	Lecture 4: Adapter classes; Inner classes, Swings: The origins of Swing;		https://www.youtube.com/watch?v=L6vQZLGHRHc		23 rd April 2020
	Lecture 5: Two key Swing features; Components and Containers;		https://www.youtube.com/watch?v=R0USRU90TOo https://www.youtube.com/watch?v=wK1zjA1vEpg https://www.youtube.com/watch?v=ngj7yowVeN0-swing https://www.youtube.com/watch?v=2h7_P_Qkas		24 th April 2020
	Lecture 6:		https://www.youtube.com/watch?v=UjPI		27 th April 2020

	The Swing Packages; A simple Swing Application; Create a Swing Applet;		JyBIFDw		
	Lecture 7: JLabel and ImageIcon;		https://www.youtube.com/watch?v=Seq3L2JwQ		29 th April 2020
	Lecture 8: JTabbedPane; JScrollPane; JList; JComboBox; JTable.		https://www.youtube.com/watch?v=Seq3L2JwQ		30 th April 2020
	Lecture 9: JTextField; The Swing Buttons		https://www.youtube.com/watch?v=Seq3L2JwQ		4 th May 2020
	Lecture 10: JTabbedPane; JScrollPane; JList; JComboBox; JTable.		https://www.youtube.com/watch?v=Seq3L2JwQ		6 th May 2020
Revision on Module 3,4,5	Refer the above same link for Module 3,4,5				7 th May to 15 th June 2020

4th sem ISE 18CS46

Module	Topics (1hr Each)	Video link	E-Materials	Date and duration
3	BANDWIDTH UTILIZATION MULTIPLEXING TYPE OF MULTIPLEXING FDM	https://www.youtube.com/watch?v=l07FiK7F5FI&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=11 https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	26 th -27 th march 2020 2 days
	WDM TDM	https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	28 th march 2020 1 days
	SYNCHRONOUS TDM	https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	29 th march 2020 1 days
	SPREAD SPECTRUM FHSS DSSS	https://www.youtube.com/watch?v=PUQMKrtUYz8 https://www.youtube.com/watch?v=MqnzaHsQ90U	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	30 th march 2020 1 days
	SWITCHING METHODS OF SWITCHING	https://www.youtube.com/watch?v=f4rsJ0e72NY&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=19 https://www.youtube.com/watch?v=K8IsEbgoPTA&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=20	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	31 th march 2020 1 days
	ERROR DETECTION TYPES OF ERROR	https://www.youtube.com/watch?v=JVhnSSJ1KC&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=16	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	1 st -2 nd april 2020

	BLOCK CODING PARITY CHECK CODE			2 days
	CYCLICK REDUNDANCY CHECK (CRC) WITH EXAMPLE PROBLEMS	https://www.youtube.com/watch?v=5Q-Yv6_0Qcw https://www.youtube.com/watch?v=T2cmKG1ax08 https://www.youtube.com/watch?v=ozusDGVPTn8 https://www.youtube.com/watch?v=LL2QpP4k_HE	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	3 rd -4 th April 2020 2 days
	CHECKSUM ADLER AND FLETCHER CHECKSUM	https://www.youtube.com/watch?v=oO0A8ro9uro	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	5 th -6 th April 2020 2 days
	FORWARD ERROR DETECTION	https://www.youtube.com/watch?v=0CLTy231Hsw	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	7 th april 2020

4	DATA LINK CONTROL DCL SERVICE DATA LINK LAYER PROTOCOL POINT TO POINT PROTOCOL	https://www.youtube.com/watch?v=EzQ7w0pkgg8&list=PLJxblOKA4CEp36Ne0yIrYjs3SE2Uc7qI5&index=2 https://www.youtube.com/watch?v=5BqMcgxIsws https://www.youtube.com/watch?v=Hr2Qg_TKEIlg https://www.youtube.com/watch?v=bhU2nRF36q4&t=177s	https://drive.google.com/open?id=1YCzm4BSZTk5gewYIbp9ZtMx37r3Y8ON	8-9 april 2020
	MEDIA ACCESS CONTROL	https://www.youtube.com/watch?v=b5chVFfn3kH0	https://drive.google.com/open?id=12OBYpY8syXbet8BY-P4AMluse33wc-GV https://eng.uok.ac.ir/abdollahpouri/Network/Lecture4_MAC.pdf https://drive.google.com/open?id=16tC5HeiCDJApO54ULLqG0PzvKWDNaXg9	10-11 april
	INTRODUCTION TO DATA LINK LAYER LINK LAYER ADDRESS ARP	https://www.youtube.com/watch?v=ULpPIVln6nI https://www.youtube.com/watch?v=EC1sIXCT3bg https://www.youtube.com/watch?v=5swaEZtZC-c	https://drive.google.com/open?id=1xWjp6HHUgbS92g_9eV4LsjvIs5YVv0RT	12-13 April 2020

	IPV4 ADDRESSING AND SUBNETTING	http://nptel.vtu.ac.in/econtent/courses/CSE/10CS64/9.php	https://drive.google.com/open?id=1VgW-YUbe0M-HaDu4kuVV8UWjY0gsU1Eb	14-15 APRIL 2020
	CIDR ADDRESSING	https://www.youtube.com/watch?v=86RDE_bP1Bs https://www.coursera.org/lecture/tcp-ip-advanced/classless-interdomain-routing-cidr-hzvwr	https://drive.google.com/open?id=1VgW-YUbe0M-HaDu4kuVV8UWjY0gsU1Eb	16 April 2020
	DHCP, NAT	https://www.coursera.org/lecture/tcp-ip-advanced/dhcp-nat-bsha5 https://www.coursera.org/lecture/networks-illustrated/dhcp-nat-ZqtC3	https://drive.google.com/open?id=1O50_I0xm2QtMRS9sGZm0Zl2cPy7AvXK -	17 April 2020
	WIRED LANS ETHERNET ETHERNET PROTOCOL STANDARD ETHERNET	https://www.youtube.com/watch?v=xbyif4oXfb8 https://www.youtube.com/watch?v=Jdd2n2DwuLg https://www.youtube.com/watch?v=-NbxylRCFdU	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k	18-19 april 2020
5	FAST ETHERNET GIGABIT ETHERNET 10 GIGABIT ETHERNET	https://www.youtube.com/watch?v=Jdd2n2DwuLg	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k	20-21 April

	10 GIGABIT ETHERNET	https://www.youtube.com/watch?v=Jdd2n2DwuLg	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k	22-23april 2020
	WIRELESS LAN IEEE 802.11 PROJECT &BLUETOOTH	https://www.youtube.com/watch?v=WcMoZ2VUyfU https://www.youtube.com/watch?v=YNmLYQWjYUY	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k ch 16.1 ref	23-25 April 2020
	CELLUAR TELEPHONY	https://www.youtube.com/watch?v=1bMxOihQinM https://www.youtube.com/watch?v=1FA2vHWqa5E	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k	26-27 April 2020
		REVISION ON MODULE 3		
3	REVISION ON BANDWIDTH UTILIZATION MULTIPLEXING TYPE OF MULTIPLEXING FDM	https://www.youtube.com/watch?v=l07FiK7F5FI&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=11 https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	4/05/2020
	REVISION ON WDM TDM	https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	9/05/2020
	REVISION ON SYNCHRONOUS TDM	https://www.youtube.com/watch?v=uz59Kr9nZ9w&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=12	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	11/05/2020

	REVISION ON SPREAD SPECTRUM FHSS DSSS	https://www.youtube.com/watch?v=PUQMKrtUYz8 https://www.youtube.com/watch?v=MqnzaHsQ90U	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	16/05/2020
	REVISION ON SWITCHING METHODS OF SWITCHING	https://www.youtube.com/watch?v=f4rsJ0e72NY&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=19 https://www.youtube.com/watch?v=K8IsEbgoPTA&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=20	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	18/05/2020
	REVISION ON ERROR DETECTION TYPES OF ERROR BLOCK CODING PARITY CHECK CODE	https://www.youtube.com/watch?v=JVhnSSJ1KC0&list=PLUtfVcb-iqn8dG1-Cn7NTEdILR3hRVgcN&index=16	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	23/05/2020
	REVISION ON CYCLICK REDUNDANCY CHECK (CRC) WITH EXAMPLE PROBLEMS	https://www.youtube.com/watch?v=5Q-Yv6_0Qcw https://www.youtube.com/watch?v=T2cmKG1ax08 https://www.youtube.com/watch?v=ozusDGVpTn8 https://www.youtube.com/watch?v=LL2QpP4k_HE	https://drive.google.com/open?id=1RDZqpQ88O_uY3usiRsg4LU3CpXa0FPiv	25/05/2020
	REVISION ON	https://www.youtube.com/watch?v=oO0A8ro9uro	https://drive.google.com/open?id=1RDZ	30/05/2020

	CHECKSUM REVISION ON ADLER AND FLETCHER CHECKSUM		gpQ88O uY3usiRsg 4LU3CpXa0FPiv	
	REVISION ON REVISION ON WIRED LANS ETHERNET	https://www.youtube.com/watch?v=xbyif4oXfb8 https://www.youtube.com/watch?v=Jdd2n2DwuLg https://www.youtube.com/watch?v=-NbxyIRCFdU	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5s wiDigifvJmX5k	1-06-2020
	REVISION ON ETHERNET PROTOCOL AND STANDARD ETHERNET	https://www.youtube.com/watch?v=Jdd2n2DwuLg https://www.youtube.com/watch?v=-NbxyIRCFdU	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5s wiDigifvJmX5k	3-06-2020
	REVISION ON FAST ETHERNET & GIGABIT ETHERNET	https://www.youtube.com/watch?v=Jdd2n2DwuLg	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5s wiDigifvJmX5k	5-06-2020
	REVISION ON 10 GIGABIT ETHERNET	https://www.youtube.com/watch?v=Jdd2n2DwuLg	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5s wiDigifvJmX5k	6-06-2020

	REVISION ON WIRELESS LAN IEEE 802.11 PROJECT AND BLUETOOTH	https://www.youtube.com/watch?v=WcMoZ2VUyfU https://www.youtube.com/watch?v=YNmLYQWjYUY	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k ch 16.1 ref	8-06-2020
	REVISION ON CELLUAR TELEPHONY	https://www.youtube.com/watch?v=1bMxOihQinM https://www.youtube.com/watch?v=1FA2vHWqa5E	https://drive.google.com/open?id=1dieL7II8DXDFrG2lw5swiDigifvJmX5k	9-06-2020