

ACADEMIC YEAR PLAN - 2019 - 20

S.Y.J.C. – COMPUTER SCIENCE (Theory)

MONTH	PAPER I	PAPER II
JUN	<p>HTML: Introduction to HTML. Its Advantage and drawbacks. Study of <HTML>, <HEAD>,<TITLE>, <BODY>,<P>,
, ,,<PRE>, <M ARQUEE> Font styles: ,<I>,<U>,<BIG>, <SM ALL>, <SUB>,<SUP>, IM AGES:<HREF>,<HR>,<IM G>,<SRC>, ALT, HEIGHT, WIDTH, ALIGN TABLES: <TABLE>,<CAPTION>,<TR>,<TH>,< TD></p>	<p>Introduction to microprocessors and organization of 8085: Evolution of microprocessors, Features of microprocessor. Block diagram of generic microprocessors and study of various blocks in it . Block diagram of 8085 up. Study of various blocks and functions of various pins on it .</p>

JUL	C++: Review of C++ Arrays, FUNCTIONS , pointers , reference, strings Principle of object oriented programming Class and object	Instruction set and programming of 8085: Addressing modes in 8085, programming model of 8085, study of Instruction set- data transfer , arithmetic, logic, branching.
AUG	Constructor and destructors Operator overloading & type conversion C++program s on the above concepts.	Stack and machine control group instructions. Assembly language programs based on above instructions.

SEP	<p>Data structures: Introduction to data structure operations, algorithmic notation, control structures Arrays- representation in memory , traversing, inserting, deleting, sorting, binary search in an array. Pointers arrays, records in memory using array Link list , representation of link list in memory Tress, binary tree, representing binary tree in memory</p>	<p>Introduction to Microcontroller : study of 8051 architecture and programming model, overview of other microcontroller's in the 8051 family, Application of microcontroller</p>
-----	--	--

OCT	<p>Operating system : Features of O.S. Services in OS, Overview of OS, WINDOWS 98, WINDOWSNT, LINUX Services of O.S. – I.M ., P.M . , M .M . Concept s related to I.M ., P.M .</p>	<p>Networking Technology: Study of transmissions Media- cable Media – Types of cables - coaxial, twisted pair , fiber optic, their comparison. Introduction to wireless media. Advantages & Disadvantages of it. Network topologies – access methods, Topologies- BUS, RING, STAR, Ethernet, Token Ring.</p>
NOV	<p>Memory management . Partitioning -fixed & variable partitioning, paging, segmentation, virtual memory. Access and security aspect of OS Security threats, attacks on security, computer worms, computer virus, types of virus etc.</p>	<p>Protocols- internet protocols Introduction to connectivity devices- modem, hubs, repeaters, routers</p>

DEC	GUI: Basic GUI features such as window , task list , drag, resize, close, minimize,	Study of X- 86 family , Features of 8086 , Comparison between microprocessors.
JAN	Revision	Revision

S.Y.J.C. – COMPUTER SCIENCE (Practical)

MONTH	PAPER I	PAPER II
JUN	HTML: 1)Designing a simple webpage with text 2)Designing a simple webpage using text and graphics	1) study of 8085 1. pin diagram of 8085 2. study of micro friend kit

JUL	VB program – use of IF...Then...Else, For...Next VB Program – Use of Do....Loop, Case...Else	3. Addition of string of bytes 4. Subtraction of two no. 5. To find largest of bytes
AUG	VB Program - use of various tools in toolbox A simple project using Visual Basic	6. To find largest and smallest of string of bytes 7. Count odd no from
SEP	C++ program – using array and pointers	9. Count the occurrence of FFH 10. Find no of 1's in data 11. To transfer string of bytes

OCT	C++ program- using CLASS implementation C++ program – based on constructors and destructors	<ul style="list-style-type: none"> 12. To find no of odds and evens 13. Transfer block in reverse order 14. Exchange content of 2 blocks 15. Separate nibble and add them 16. Separate nibble and multiply 17. Exchange nibble and
NOV	C++ program – based on operator overloading	<ul style="list-style-type: none"> 18. Multiplication of 2 no 19. Division of 2 no 20. Addition of block using DAD instruction 21. Addition of two 16 bit no. 22. Addition of 32 bit no.
DEC	C++ program – based on type conversion C++ program – based on single	<ul style="list-style-type: none"> 23. Monitor programs 24. Display routine 25. Keyboard routine

JAN	REVISION	REVISION
-----	----------	----------