

ACADEMIC YEAR PLAN - 2018-19

S.Y.J.C. – COMPUTER SCIENCE (Theory)

M ONTH	PAPER I	PAPER II
JUN	<p>HTML: Introduction to HTML. Its Advantage and drawbacks. Study of <HTML>, <HEAD>,<TITLE>, <BODY>,<P>,
, ,,<PRE>, <MARQUEE> 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	<p>C++: Review of C++ Arrays, FUNCTIONS , pointers , reference, strings Principle of object oriented programming Class and object</p>	<p>Instruction set and programming of 8085: Addressing modes in 8085, programming model of 8085, study of Instruction set- data transfer , arithmetic, logic, branching.</p>

AUG	<p>Constructor and destructors Operator overloading & type conversion C++programs on the above concepts.</p>	<p>Stack and machine control group instructions. Assembly language programs based on above instructions.</p>
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 :</p> <p>Features of O.S. Services in OS, Overview of OS, WINDOWS 98, WINDOWSNT, LINUX Services of O.S. – I.M., P.M. , M.M. Concepts related to I.M., P.M.</p>	<p>Networking Technology:</p> <p>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	<p>GUI: Basic GUI features such as window , task list , drag, resize, close, minimize,</p>	<p>Study of X- 86 family , Features of 8086 , Comparison between microprocessors.</p>
JAN	<p>Revision</p>	<p>Revision</p>

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 add
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

