SARASWATI MAHILA MAHAVIDYALAYA,PALWAL
SESSION:**2021-22**

LESSON PLAN   Sem : Even

Name of faculty : Ms. Lalita   Class : BCA-I

Designation : Assistant Professor in Maths   Subject : Maths

Sr.No.	Topics/chapters	Lectures	Topics of assignment/test
1	Preparing frequency distribution table, mean, mode, median, variance, range & standard deviations. Correlation & regression.	Lect 1 to Lect 20	Assignment of mean, median, mode. Test of frequency distribution table & mean, median, mode.
2	**Algorithm** : Exponentiation,linear & Binary search. Big oh notation. Worst case, advantage of logarithm over linear algorithm, complexity. Graph theory : Graph, types, degree of vertex, subgraph, path circuit.	Lect 21 to Lect 40	Assignment of linear & binary search. Revision of algorithm. Test of exponentiation & time complexity of linear & binary search.
3	**Trees** :trees, minimum distance trees, minimum weight trees. **Recursion**: recursive function, merge sort, insertion sort, bubble sort & decimal to binary.	Lect 41 to Lect 60	Assignment of merge & insertion sort. Revision of decimal to binary. Test of merge,insertion, bubble sort.

| 4 | **Recurrence relations**: LHRR , LHRRWCCs , DCRR, recursive procedures.
Number Theory: Principles of mathematical induction, GCD, Euclidean algorithm, Fibonacci number , equivalence relations ,public key encryption schemes. | Lect 61 to Lect 80 | Assignment of principles of mathematical induction.
Revision of examples based on LHRR, LHRRWCCs , DCRR. |