CLASS - XII

SEMESTER – III

SUBJECT : STATISTICS (STAT)

FULL MARKS: 35   **CONTACT HOURS: 60 Hours**

COURSE CODE : THEORY

UNIT No.	TOPICS	CONTACT HOURS	MARKS
UNIT 1	Mathematics: Concept of series and sequence, Concept of convergence and divergence and related sums. Infinite series, e-series and log series and related sums. Concept of Maximum and Minimum, Concept of Partial derivative, Concept of Infinite Integral(Gamma integral and Beta integral and their relation with factorial)	16	06
UNIT 2	Probability Distributions Random Variables and its Probability distribution, Cumulative distribution function, Probability Mass Function, Probability density function , Expectation, Variance	15	10
UNIT 3	Some Discrete Distribution Uniform distribution, Binomial distribution, Poisson distribution, Geometric distribution and their properties with related problem Sums. Fitting of above distributions.	16	12
UNIT 4	Least square method and curve fitting (linear and exponential)	04	02
UNIT 5	Time series Analysis Introduction, Different components of time series, Different models of time series, Trend determination by method of simple moving averages and by fitting Mathematical curves (straight line and exponential curve)using least square principle.	09	05
	TOTAL	**60 Hours**	**35**