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Department of Statistics**




**CO's for Third Year UG  
For AY June 2020 Onwards..  
Revised as per CBCS**

| Course Title                         | Course Outcomes   |
|--------------------------------------|---|
| Probability Distributions            | <ol style="list-style-type: none"><li>1) knowledge of important univariate distributions such as Laplace, Cauchy, Lognormal, Weibull, Logistic, Pareto, Power Series Distribution.</li><li>2) knowledge of Multinomial and Bivariate Normal Distribution.</li><li>3) knowledge of Truncated Distributions.</li><li>4) information of various measures of these probability distributions.</li><li>5) acumen to apply standard continuous probability distributions to different situations.</li></ol>   |
| Statistical Inference-I              | <ol style="list-style-type: none"><li>1) knowledge about important inferential aspect of point estimation.</li><li>2) concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportions.</li><li>3) knowledge of various important properties of estimator,</li><li>4) knowledge about inference of parameters of standard discrete and continuous distributions.</li><li>5) concept of Fisher information and CR inequality.</li><li>6) knowledge of different methods of estimation.</li></ol> |
| Design of Experiments                | <ol style="list-style-type: none"><li>1) knowledge of basic terms used in design of experiments.</li><li>2) concept of one-way and two-way analysis of variance.</li><li>3) knowledge of various designs of experiments such as CRD, RBD, LSD and factorial experiments.</li><li>4) knowledge of using an appropriate experimental design to analyze the experimental data.</li></ol>   |
| R-Programming and Quality Management | <ol style="list-style-type: none"><li>1) importance of R- programming</li><li>2) knowledge of identifiers and operators used in R.</li><li>3) knowledge of conditional statements and Loops used in R.</li><li>4) knowledge of quality tools used in Quality management.</li><li>5) knowledge of process and product control used in Quality management.</li></ol>  |

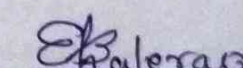


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|---|---|
| Probability Theory and Applications     | 1) knowledge about order statistics and associated distributions<br>2) concept of convergence and Chebychev's inequality and its uses<br>3) concept of law large numbers and central limit theorem and its uses.<br>4) knowledge of terms involved in reliability theory as well as concepts and measures.  |
| Statistical Inference-II                | 1) concept of interval estimation.<br>2) knowledge of interval estimation of mean, variance and population proportion.<br>3) knowledge of important aspect of test of hypothesis and associated concept.<br>4) concept about parametric and non-parametric methods.<br>5) Knowledge of some important parametric as well as non-parametric tests.   |
| Sampling Theory                         | a1 basic knowledge of complete enumeration and sample, sampling frame sampling distribution, sampling and non-sampling errors, principle steps in sample surveys, sample size determination, limitations of sampling etc.<br>2) concept of various sampling methods such as simple random sampling, stratified random sampling, systematic sampling and cluster sampling.<br>3) an idea of conducting sample surveys and selecting appropriate sampling techniques.<br>4) knowledge of comparing various sampling techniques.<br>5) knowledge of ratio and regression estimators. |
| Operations Research and Decision Theory | 1) Concept of Linear programming problem.<br>2) Knowledge of solving LPP by graphical and Simplex method.<br>3) Knowledge of Transportation, Assignment and Sequencing problems.<br>4) Concept of queuing theory.<br>5) Knowledge of simulation technique and Monte Carlo technique of simulation.  |

  
Head

Department of Statistics



  
Principal