Faculty Profile

Faculty Name	Dr. Rachna Khurana
Designation	Assistant Professor
Qualification	Ph.D, M.Phil, M.Sc
Email	rachna.applied@piet.co.in, rkhuranaa@yahoo.com
Area of Interest	Reliability Engineering
Work Experience (Total)	17
• Teaching	17
• Research	6
• Industry	
• Others	
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Applied Mathematics-I, Applied Mathematics – II, Calculus & linear Algebra, Mathematics – III, Discrete Mathematics, Applied & Computational Mathematics, Probability & Statistics, Numerical methods, Business Statistics, Business Mathematics – I, Business Mathematics - II
Membership of Professional Bodies	Life time member of Indian Society of Technical Education (ISTE) Life time member of Indian Society of Information Theory And Applications (ISITA).
Research Publications	
• Research Papers UGC-CARE	3
• Research Papers SCOPUS	2
• Research Papers WoS/SCI/ABDC	1
• List of Publications	**Total - 6** • Rachna Khurana, A.K.lal, S.S.Bhatia, R.K.Tuteja, Cost Analysis of a Two-Unit Standby Industrial System with Varying Demand in *International Journal of Research in Advent Technology, Vol 3, No. 6, June 2015 (Non SCI).* • Rachna Khurana, A.K.lal, S.S.Bhatia, R.K.Tuteja, Reliability and Economic Analysis of a System Consisting of Two Dissimilar units with variation in production in *Ciência e Técnica Vitivinícola Journal – A*

	Science and Technology Journal (SCI), Vol. 32, No. 8, 384-399 (2017) • Rachna Khurana, A.K.lal, S.S.Bhatia, Shakuntla, Analysis of a Three Unit System with Demand Dependent Operability of Units in *International Journal of Scientific Research in Statistical and Mathematical Sciences*, Vol 6, Issue 1, 1-24, (2019). • Shakuntla, A.K.lal, S.S.Bhatia, Rachna, Analysis of Non-Markovian Process by the Inclusion of Supplementary Variables in *International Journal of Scientific Research in Statistical and Mathematical Sciences*, Vol 6, Issue 1, 245-250, (2019). • Rachna, A.K.lal, S.S.Bhatia, Shakuntla, Cost Analysis of a Two Dissimilar Unit System with Goodwill Loss When Demand is More Than Production, *Wutan Huatan Jisuan Jishu (SCOPUS)*, Volume XVI, Issue VI, 362-379 (2020). • Shakuntla, A.K.lal, S.S.Bhatia, Rachna, Analytical Approach for Reliability Evaluation by the Inclusion of Supplementary Variables, *Wutan Huatan Jisuan Jishu (SCOPUS)*, Volume XVI, Issue V, 210-218 (2020).
Book and Chapter Publications	
• Books Authored published by International Publishers	
• Books Authored published by National Publishers	
• Publication of Chapter in Edited Books	
• Editor of Book by International Publishers	
• Editor of Book by National Publishers	
• Translation Work of Book	
• List of Book and Chapter	

Publications	
Patents	
• Published	
• List of published patent(s)	
• Filed	
• List of filed patent(s)	
PhD Guidance	
• Degree Awarded	
• Thesis Submitted	
M.Tech. Guidance	
• Degree Awarded	
• Thesis Submitted	
Research Project	
• List of Research project	
Consultancy	
• List of Consultancy	
Awards & Honours	
• List of Awards & Honours	
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	
• International (Abroad)	
• International (Within Country)	**4**
• National	**1**
• List of published papers	• Presented a paper entitled " A Stochastic Model to Study the Cost Benefit Analysis of A Two Unit System Working in a Rice plant" in International Conference on Advances in Modeling, Optimization and Computing (AMOC-2011) organized by Department of Mathematics, IIT Roorkee, held on December 5-7, 2011.

	• Presented a paper entitled " Analysis of a Three Unit Standby System Working in a Rice plant with Varying Demand with no Condition on Number of Simultaneous Repairmen" in International Conference on History of Development of Mathematical Sciences and Symposium on Non-Linear Analysis (ICHDMS-2012) organized by Department of Mathematics, M.D.U. Rohtak, held on November 21-24, 2012. • Presented a paper entitled "Stochastic Model to Study Two Unit Standby System Working with Varying Demand" in International Conference on Emerging Trends in Computational and Applied Mathematics (ICCAM) organized by ITM University, Gurgaon held on June 2-4, 2014. • Reliability Analysis of A Two Unit Standby System Working In A Rice Plant With Varying Demand in proceedings of International Conference on Innovations & Trends to Support Make in India (ICITSMI – 2017) organized by N.C. College of Engineering, Israna, Panipat held on March 25-26, 2017. • Completed 4 week online course on Introduction to Probability and Statistics by Swayam from Jan 2020.
Organizing National Conference/ International Conference/ FDP/STTP	Organized National level seminar on " Application of Mathematics in Engineering Sciences" sponsored by **AICTE**
• List of Conference/FDP/STTP committee	
Social Contributions and Sports	
• **List of Social Contributions and Sports**	