## MAHARAJA AGRASEN COLLEGE

University of Delhi
VASUNDHARA ENCLAVE, DEIHI-II0096

Curriculum Vitae of Faculty Members

| First Name | Dr. | RENU |  |  | SAINI |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Designation | Assistant Professor |  | Department |  | Mathematics |  |  |
| Date of Birth | 18/02/1985 |  | Date of Joining |  | 29/01/2018 |  |  |
| Residential Address | L-12A02, Grand Ajnara Heritage, Sector-74, Noida. |  |  |  |  |  |  |
| Contact No | 9811733163 |  | Email Id |  | renusaini@mac.du.ac.in |  |  |
| Education |  |  |  |  |  |  |  |
|  | Institution | Year |  | Details |  |  |  |
| Ph.D | IIT Roorkee | Jan, 2016 |  | - |  |  |  |
| Masters | IIT Roorkee | 2008 |  | Ist |  |  |  |
| Graduation | H. N. B Garhwal University | 2006 |  | Ist |  |  |  |
| Career Profile |  |  |  |  |  |  |  |
| Organization/ Institution | Post Held | Adh Per | /Temp/ anent | From |  | To | Total Experience |
| Inderprastha Engineering College | Assistant Professor |  | manent | 11/07/2016 |  | $\begin{aligned} & 27 / 01 \\ & / 2018 \end{aligned}$ | 1.6 Years |
| Maharaja Agrasen College, University of Delhi | Assistant Professor | Ad-hoc |  | 29/01/2018 |  | Till date | 4.10 Year |

## Teaching Experience (Subjects/Courses Taught)

Engineering Mathematics-I, Computer Based Numerical and statistical Techniques, Engineering Mathematics-II, Engineering Mathematics-III, Linear Algebra, Real Analysis, Numerical Analysis, Operational Research and Calculus.

## Areas of Interest/Specialization

Theory of vibration, Numerical Analysis, Differential equations

Details of Published Research Papers, Books, Monographs, Reviews, Chapter in Books, Translations and Creative Positons held

| Year of <br> Publications | Title | ISBN No | Publisher | Co-Authors |
| :---: | :---: | :---: | :---: | :---: |
| 2013 | Buckling and <br> vibration of non- <br> homogeneous <br> rectangular plates | $1070-$ <br> 9622 | Shock and Vibration | Roshan Lal and <br> Renu Saini |


| 2015 | subjected to linearly <br> varying in-plane force. <br> Buckling and vibration analysis of non-homogeneous rectangular Kirchhoff plates resting on two- | $\begin{aligned} & 00256455 \\ & \text { (Print) } \\ & 15729648 \\ & \text { (Online) } \end{aligned}$ | Meccanica | Roshan Lal and Renu Saini |
| :---: | :---: | :---: | :---: | :---: |
| 2015 | On the use of GDQ for vibration characteristic of nonhomogeneous orthotropic rectangular plates of bilinearly varying thickness. | $\begin{gathered} 0001- \\ 5970 \end{gathered}$ | Acta Mechanica | Roshan Lal and Renu Saini |
| 2016 | Mode shapes and frequencies of rectangular plates with arbitrarily varying nonhomogeneity along two concurrent edges. | $\begin{gathered} 1077- \\ 5463 \end{gathered}$ | Journal of Vibration and Control | Roshan Lal and Renu Saini |
| 2018 | Free vibration analysis of twodimensional nonhomogeneous rectangular plates of variable thickness | $\begin{gathered} 0974- \\ \text { 570X } \\ \text { (Online); } \\ 0974- \\ 5718 \\ \text { (Print) } \end{gathered}$ | International Journal of Mathematics and Computation | Renu Saini and Roshan Lal |
| 2022 | Dynamic analysis of heated temperaturedependent bidirectional advanced composites circular plates with quadratically thickness variation | $\begin{gathered} 0149- \\ 5739 \end{gathered}$ | Journal of Thermal Stresses | Rahul Saini, Roshan Lal, Renu Saini, and Mohamed Amine Khadimallah |
| Participation in conferences, seminars, workshops, refreshers, orientation courses attended, summer institutes etc. |  |  |  |  |
| State/National International | Title |  | Organization | Period |
| International Conference <br> International Conference | Buckling and vibrati homogeneous orth rectangular plates wi thickness using <br> Transverse vibratio homogeneous rectang using GDQ | of nontropic variable QM. <br> of nonular plates | Second International <br> Conference on Soft Computing for Problem Solving (Soc ProS-2012)" held at JK Lakshmipath University, Jaipur, Rajasthan, India. <br> International Conference on Mathematics and Engineering Science (ICMES-2014)" held | $\begin{gathered} \text { December 28-30, } \\ 2012 . \end{gathered}$ |


|  |  | at Chitkara University, Baddi, Himachal Pradesh, India. | March 20-22, 2014. |
| :---: | :---: | :---: | :---: |
| International Conference | Transverse vibration of simply supported non-homogeneous rectangular plates of variable thickness. | International Conference on Mathematical Sciences (ICMS-2014)" held at Sathyabama University, Chennai, Tamil Nadu. | July 17-19, 2014. |
| International Conference | Transverse vibration of nonhomogeneous rectangular plates of variable thickness using GDQ. | International Conference on Computer Science and Applied Mathematics (ICCSAM-2014). | $\begin{gathered} \text { September 11-12, } \\ 2014 . \end{gathered}$ |
| International Conference | Transverse vibration of nonhomogeneous rectangular Kirchhoff plates of variable thickness | International Conference on Recent Trends in Mathematical Analysis and its Applications (ICRTMAA-2014) | $\begin{gathered} \text { December 21-23, } \\ 2014 . \end{gathered}$ |
| Workshop | Introduction to MATLAB and MATHEMATICA | Indian Institute of Technology Roorkee, Roorkee, Uttarakhand. | April 21-22, 2012. |
| Workshop | Scientific Computing: Theory and Practices (SCTP-2012) | Faculty of Engineering and Technology, Gurukul Kangri University, Haridwar | October 8-13, 2012. |
| Workshop | Emerging Computational Methods for Science and Engineering Applications | Jaypee Institute of Information Technology, Noida | March 15-16, 2019. |
| Faculty Development Program | Faculty Development Program on R Programming | Maharaja Agrasen College, University of Delhi, Delhi. | $\begin{gathered} \text { February 21-27, } \\ 2018 . \end{gathered}$ |
| Webinar | Enhancing, 'Research interest 'of research publication. | Maharaja Agrasen College, University of Delhi, Delhi. | 3, June 2020 |
| Webinar | An analysis of opting old tax rates regime for financial year 2020-21 | Maharaja Agrasen College, University of Delhi, Delhi. | 2, June 2020 |
| Webinar | Roles of Statistics and Opportunities in UNICEF and Population Science | Maharaja Agrasen College, University of Delhi, Delhi. | 17, September 2020 |
| International Conference | Effect of exponentially varying non-homogeneity on the transverse vibration of | JECRC University, Jaipur (Raj.), India | 7-9, August 2020 |


|  | orthotropic rectangular plates |  |  |
| :---: | :---: | :---: | :---: |
| International Conference | Generalized differential quadrature method for vibration analysis of non-homogeneous orthotropic thin rectangular plates | Indian Mathematical Society | $\begin{gathered} \text { 17-20, December } \\ 2020 \end{gathered}$ |
| e-short term course | Advanced Mathematical Techniques for Engineers \& Scientists (AMTES20) | TEQIP-III SPONSOERED ESTC National Institute of Technology Rourkela | $\begin{gathered} \text { 28-30, September } \\ 2020 \end{gathered}$ |
| e-short term course | Linear Algebra and its Applications | Indian Institute of Technology, Delhi | $\begin{gathered} \text { 16-20, December } \\ 2020 \end{gathered}$ |
| Faculty <br> Development <br> Program | Decision Making In Management Using R | Guru Angad Dev Teaching Learning Centre SGTB Khalsa College, University of Delhi | 23 October-1 <br> November 2020 |
| Faculty Development Program | Teaching and Learning Strategies of Differential Equations and Applications in Science and Engineering | National Institute of Technology Warangal | $\begin{aligned} & 28 \text { December 2020- } \\ & 1 \text { January } 2021 \end{aligned}$ |
| International Conference | An exact solution of vibration of simply supported isotropic rectangular plates | $87^{\text {th }}$ Annual Conference of Indian Mathematical Society | December 4-7,2021 |
| Workshop | Document Preparation Using Latex | by A2Z Edulearning Hub | November 19-21, 2021 |
| Workshop | Differential Equations: Theory, Analysis and Application with Matlab-2021(DETAAM-2021) | School of Physical Sciences, DIT University | 12-16 July 2021 |

I certify that the information given above is correct and factual to the best of my knowledge.

