



ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



10.22214/IJRASET



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled  
Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial  
Variation of Material Properties*

*by*

*Alok Ranjan Biswal*

*after review is found suitable and has been published in  
Volume 11, Issue VI, June 2023  
in*

*By [Signature]*

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology  
(International Peer Reviewed and Refereed Journal)  
Good luck for your future endeavors*



ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled*  
*Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial*  
*Variation of Material Properties*  
*by*  
*Deepak Ranjan Biswal*

*after review is found suitable and has been published in*  
*Volume 11, Issue VI, June 2023*  
*in*

*By [Signature]*

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology  
(International Peer Reviewed and Refereed Journal)  
Good luck for your future endeavors*

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL  
SJIF 7.429





ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled  
Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial  
Variation of Material Properties*

*by  
Rasmi Ranjan Senapati*

*after review is found suitable and has been published in  
Volume 11, Issue VI, June 2023  
in*

*By [Signature]*

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology  
(International Peer Reviewed and Refereed Journal)  
Good luck for your future endeavors*



ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



10.22214/IJRASET



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled  
Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial  
Variation of Material Properties*

*by  
Abinash Bibek Dash*

*after review is found suitable and has been published in  
Volume 11, Issue VI, June 2023  
in*

*By [Signature]*

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology  
(International Peer Reviewed and Refereed Journal)  
Good luck for your future endeavors*





ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled*  
*Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial*  
*Variation of Material Properties*  
*by*  
*Poonam Prusty*

*after review is found suitable and has been published in*  
*Volume 11, Issue VI, June 2023*  
*in*

By 

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology*  
*(International Peer Reviewed and Refereed Journal)*  
*Good luck for your future endeavors*



ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



10.22214/IJRASET



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled  
Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial  
Variation of Material Properties*

*by*

*Shibabrata Mohapatra*

*after review is found suitable and has been published in  
Volume 11, Issue VI, June 2023  
in*

*By [Signature]*

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology  
(International Peer Reviewed and Refereed Journal)  
Good luck for your future endeavors*





ISSN No. : 2321-9653

# IJRASET

**International Journal for Research in Applied  
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : [www.ijraset.com](http://www.ijraset.com), E-mail : [ijraset@gmail.com](mailto:ijraset@gmail.com)

ISRA  
JIF

ISRA Journal Impact  
Factor: 7.429



45.98  
INDEX COPERNICUS



THOMSON REUTERS  
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL  
SJIF 7.429

## Certificate

*It is here by certified that the paper ID : IJRASET54453, entitled*  
*Finite Element Based Static and Dynamic Vibration Analysis of a Beam with Axial*  
*Variation of Material Properties*  
*by*  
*Sanjeev Panda*

*after review is found suitable and has been published in*  
*Volume 11, Issue VI, June 2023*  
*in*

By 

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &  
Engineering Technology*  
*(International Peer Reviewed and Refereed Journal)*  
*Good luck for your future endeavors*