

**SSR DVV Clarification: 2016-2017 to 2020-2021: Criteria-III - Research, Innovations & Extension**

**3.3.3: Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**

**a) Books and Chapters in Edited Volumes/Books Published**

Sr. No.	Name of Teacher	Title of the book/chapters published	Year	ISSN / ISBN Number	Name of Publisher
<b>2020 - 2021</b>					
1	Dr. V. H. Raiwatkar	साहित्याची संकल्पना व स्वरूप (Sahityachi Sankalpana va Swaroop)	2021	978-93-92982-18-7	Yashawantrao Chavhan Maharashtra Open University, Nashik
2	Dr. K. N. Wasurke	Useful Technologies for LIS Professionals	2021	978-144-340-00-56	Anthem Publication, London, UK
3	Dr. S. S. Kola	Green Computing Technologies and Computing Industry in 2021/ <i>Chapter - Eco-Friendly, Green Approach for Synthesis of Bio-Active Novel 3-Aminoindazole Derivatives.</i>	2021	ISBN: 978-1-83968-753-2 Print ISBN: 978-1-83968-752-5 eBook (PDF) ISBN: 978-1-83968-754-9	Intech Open Publishers, London
4	Dr. S. S. Kola	Heterocycles - Synthesis and Biological Activities – Edited by Belakatte Parameshwarappa Nandeshwarappa/ <i>Chapter - Potent Antibacterial Profile of 5- Oxo-Imidazolines in the New Millennium</i>	2020	978-1-83880-624-8 e-Book – 978-1-83880-625-5	Intech Open Publishers, London
<b>2019 - 2020</b>					
5	Dr. C. D. Mungmode	Physics B.Sc. Semester III (CBCS)	2019	978-93-5367-630-8	Himalaya Publishing House, Mumbai
6	Dr. R. N. Chavhan	Text Book of Zoology B.Sc. Semester - III	2019	978-93-82683-77-3	M/s Rajni Prakashan & books distributors, Nagpur
7	Dr. R. N. Chavhan	Text Book of Zoology B.Sc. Semester - II	2020	978-93-82683-85-8	M/s Rajni Prakashan & books distributors, Nagpur

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8	Dr. J. Papadkar	A Text Book of Zoology B.Sc. Semester-V Aquatic Biology	2019	–	Celebrations Infomedia, Hinganghat
9	Dr. J. Papadkar	A Text Book of Zoology Semester- V Applied Zoology paper-II	2019	–	Celebrations Infomedia, Hinganghat
10	Dr. J. N. Papadkar	B. Sc. Sem-IV, Text books of Zoology - Microtechnique, Bioinformatics and Biostatistics	2020	–	Celebrations Infomedia, Hinganghat
<b>2018 - 2019</b>					
11	Dr. C.D. Mungmode	Physics – B.Sc. Semester IV	2019	978-93-5299-761-9	Himalaya Publishing House, Mumbai
12	Dr. C.D. Mungmode	Physics – B.Sc., Semester - I	2018	978-93-5299-329-1	Himalaya Publishing House, Mumbai
13	Dr. R. M. Thombre	Thermal Physics and Statistical Mechanics	2019	938781287-1	Pragati Prakashan, Meerut
14	Dr. R. N. Chavhan	B. Sc. Sem-IV, Text books of Zoology	2018	978-93-82683-56-8	M/s Rajni Prakashan & books distributors, Nagpur
15	Dr. Amita Bannore	Home science and women empowerment Book edited by Dr. Vandana Banker and Pratibha Agharde/ ताणतणाव आणि स्त्रीचे आरोग्य	2019	978-93-88153-01-5	Dr. Vandana Banker and Pratibha Agharde
16	Prof. N. N. Meshram	भारतीय साहित्य विविध आयाम / <i>Agha Shahid Ali': A Ghazal writer</i>	2019	978-93-88130-17-2	A.R. Publishing Company, New Delhi
17	Dr. V. H. Raiwatkar	भारतीय साहित्य विविध आयाम/ <i>स्वीदनाथ टागोर यांची भारतीय साहित्यातील योगदान</i>	2018	978 – 93-88130 – 17 - 2	A.R. Publishing Company, New Delhi
<b>2017 - 2018</b>					
18	Dr. L.H. Khalsa	Thermoelastic Problems on Elliptical Objects with Internal Heat Source	2018	978-620-2-30753-6	Scholar's Press, Germany
19	Dr. L.H. Khalsa	Mathematics B.Sc. Sem. I (CBCS)	2017	978-93-5273-455-9	Himalaya Publishing House, Mumbai

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20	Dr. L.H. Khalsa	Mathematics B.Sc. Sem. II (CBCS)	2018	978-93-5273-713-0	Himalaya Publishing House, Mumbai
21	Dr. L.H. Khalsa	Differential Calculus and Trigonometry	2018	978-93-87812-57-4	Pragati Prakashan, Meerut
22	Dr. C. D. Mungmode	Physics F.Y. B.Sc. Semester II (CBCS)	2018	978-93-5299-034-4	Himalaya Publishing House, Mumbai
23	Dr. V.P. Wanjari	साहित्यसरिता भाग - 1 (Sahityasarita)	2017	978-93-83-132-51-5	Raghav Publisher & Distributor, Nagpur
<b>2016 - 2017</b>					
24	Dr. L. H. Khalsa	Modeling in Applied Problems	2016	978-3-639-86357-4	Scholars' Press, Germany
25	Dr. L. H. Khalsa	Thermoelastic Modeling in Homogeneous & Functionally Gradient Material	2016	978-3-639-85948-5	Scholars' Press, Germany
26	Dr. J. N. Papadkar	Reproductive Biology	2016	978-3-659-95876-2	LAP Lambert Academic Publishing
27	Dr. V.P. Wanjari	Striwad Ani Dr. Vijaya Rajadhaksha	2016	978-81-921132-5-8	Shubhay Publication, Mumbai
28	Dr. R.V. Ghonmode	Mughal – Rajput Sambandh: 1526 - 1707	2016	978-81-933092-2-3	Lotus & Cobra Publishing House, Nagpur
29	Dr. R.V. Ghonmode	Sadashivraobhau Ballal: Kal Ani Kartutva	2016	978-81-933092-1-6	Lotus & Cobra Publishing House, Nagpur
30	Dr. V.P. Gorde, P.S. Meshram	A Geographical Study of Tribal Tourism and its Problems in Gadchiroli District	2016	ISSN: 2394-8426	Gurukul IMR Journal, Pune

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**b) Papers published in national/ international conference proceedings**

Sr. No.	Name of the Teacher	Title of the paper	Name of the conference	Year of publication	ISBN/ISSN number	Name of the publisher	Link to the Paper
<b>2020 - 2021</b>							
1	Dr. V. H. Raiwatkar	झडिपट्टी रंगभूमीवारील नाटकांतील सामाजिकता	साहित्य और समाज सुधार	2021	2455-1511	Principal, Arts & Commerce College, Undale & Sanskruti Multidisciplinary Research and Development Training Institute, Pimplekhunte, Solapur (M.S.)	<a href="http://www.mgcolgearmori.ac.in/files/publication/Dr.%20V.H.%20RAIWATKAR%2021-22.pdf">http://www.mgcolgearmori.ac.in/files/publication/Dr.%20V.H.%20RAIWATKAR%2021-22.pdf</a>
2	Dr. V.P. Gorde, P.S. Meshram	कोविड -19 चा पर्यावरणावरील प्रभाव	Impact of COVID-19 on Higher Education	2021	2278-9308	B. Aadhar - Aadhar International Publications, Amravati	<a href="http://www.mgcolgearmori.ac.in/files/V.P.%20GORDE3%2020-21.pdf">http://www.mgcolgearmori.ac.in/files/V.P.%20GORDE3%2020-21.pdf</a>
3	Dr. V.P. Gorde, P.S. Meshram	Geographical study of demographic factors in Gadchiroli district - 2001 to 2011	Sustainable Development Goals: Initiative, Execution and Challenges	2021	2230-9578	Principal, Gramin (ACS) Mahavidyalaya, Vasantnagar (Kotgyal) (M.S.) - Journal of Research and Development	<a href="http://www.mgcolgearmori.ac.in/files/V.P.%20Gorde4%2020-21.pdf">http://www.mgcolgearmori.ac.in/files/V.P.%20Gorde4%2020-21.pdf</a>
4	P.S. Meshram	Global Warming and its Effects on Bio-Diversity	Environmental Changes, Biodiversity and Sustainable Resource Management	2020	2229-4929	Dr. B. M. Bhanje, S.B.P. Arts, Commerce and Science College Mandrup (M.S.) - Akshar Wangmay Publication	<a href="http://www.mgcolgearmori.ac.in/files/publication/N%20N%20MESHGRAM%2020-21.pdf">http://www.mgcolgearmori.ac.in/files/publication/N%20N%20MESHGRAM%2020-21.pdf</a>
5	Dr. D. V. Thakare	क्रिडा विपणन	Effect of Corona Pandemic on Various Sports Sectors	2021	2319-4766	Scholarly Research Journal for Interdisciplinary Studies, Ambegaon, Pune	<a href="http://www.mgcolgearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%202%2020-21.pdf">http://www.mgcolgearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%202%2020-21.pdf</a>
6	Dr. D. V. Thakare	Impact of media on sports	Contemporary Approaches and application in physical education and sports science	2021	2278-9308	B.Aadhar - Aadhar Publications, Amravati	<a href="http://www.mgcolgearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%201%2020-21.pdf">http://www.mgcolgearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%201%2020-21.pdf</a>

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7	Dr. G. M. Kadhav	भारतातील बालमजुरी समस्या एक सामाजिक दृष्टीकोण	Recent Trends and Issues in Social Science and Science Towards Sustainable Development	2020	2229-4929	Dr. R. K. Pardeshi, Sant Ramdas Arts, Commerce and Science College, Ghanasawangi (M.S.) - Akshar Wangmay Publication	<a href="http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav3%2020-21.pdf">http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav3%2020-21.pdf</a>
8	Dr. G. M. Kadhav	भारतातील लिंगभाव समस्या : एक गंभीर समस्या	Indian Women: Present, Past and Future	2020	2278-9308	Principal, Sham Gadale Art's College, Dahipal (Wadmauli), Beed (M.S.) - B.Aadhar, Aadhar Publication, Amravati	<a href="http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav2%2020-21.pdf">http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav2%2020-21.pdf</a>
9	Dr. G. M. Kadhav	आदिवासी समाजातील बालकामगारांचे समाजशास्त्रिय अध्ययन (विशेष संदर्भ : गडचिरोली जिल्हयातील आरामोरी तालुका)	Tribal Society in Contemprorary India: Issues, Problems & Remedies	2021	2319-4766	Principal, Lokmanya Mahavidyalaya, Warora (M.S.) - Scholarly Research Journal for Interdisciplinary Studies.	<a href="http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav1%2020-21.pdf">http://www.mgclegearmori.ac.in/files/G.M.%20Kadhav1%2020-21.pdf</a>
10	Dr. V.P. Gorde	A Geographical View on Sex Ratio in Vidarbha Region -2011	Recent Trends and Issues in Social Science and Science Towards Sustainable Development	2020	2229-4929	Dr. R. K. Pardeshi, Sant Ramdas Arts, Commerce and Science College, Ghanasawangi (M.S.) - Akshar Wangmay Publication	<a href="http://www.mgclegearmori.ac.in/files/V.P.%20Gorde2%2020-21.pdf">http://www.mgclegearmori.ac.in/files/V.P.%20Gorde2%2020-21.pdf</a>
11	Dr. V.P. Gorde	Review of environmental disaster in India -2019	Environmental Changes, Biodiversity and Sustainable Resource Management	2020	2229-4929	Dr. B. M. Bhanje, S.B.P. Arts, Commerce and Science College Mandrup (M.S.) - Akshar Wangmay Publication	<a href="http://www.mgclegearmori.ac.in/files/V.P.%20GORDE%201%2020-21.pdf">http://www.mgclegearmori.ac.in/files/V.P.%20GORDE%201%2020-21.pdf</a>
<b>2019 - 2020</b>							
12	Dr. C. D. Mungmode	Photoluminescence in NaCa <sub>2</sub> Br <sub>5</sub> :Eu <sup>2+</sup> + Novel Phosphor	Recent Trends in Mathematical, Physical, Chemical, Library, Life Sciences - 2020	2020	ISSN: 2322-0015	Int. Res. J. of Science & Engineering (IRJSE), Amravati (M.S.)	<a href="http://www.mgclegearmori.ac.in/files/publication/Dr.%20C.%20D.%20MUNG%20MODE%2019-20.pdf">http://www.mgclegearmori.ac.in/files/publication/Dr.%20C.%20D.%20MUNG%20MODE%2019-20.pdf</a>
13	V. P. Padole	Culture in the novels of Anita Nair	Effects of Crisis on Language, Literature and Culture	2020	2349-5189	Langlit, International Journal, Omerga, Dist. Osmanabad - 413606 (M.S.)	<a href="http://www.mgclegearmori.ac.in/files/publication/V.%20P.%20PADOLE%2019-20.pdf">http://www.mgclegearmori.ac.in/files/publication/V.%20P.%20PADOLE%2019-20.pdf</a>

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14	Dr. V.P. Gorde, P.S. Meshram,	Watershed and Water Management	Impact of Urbanization on Socio-Economic Development in India	2020	E-ISSN 2455-1511	Sanskriti Multidisciplinary Research and Development Training Institute, Pimpalkhunte Tal: Madha, Dist. Solapur (M.S.)	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%20%2019-20.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%20%2019-20.pdf</a>
15	S. K. Mohurle	Jasmine : A courageous and successful immigrant	Effects of Crisis on Language, Literature and Culture	2020	2349-5189	Langlit, International Journal, Omerga, Dist.Osmanabad - 413606 (M.S.)	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/S.K.%20MOHURLE%2019-20.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/S.K.%20MOHURLE%2019-20.pdf</a>
16	A. P. Raut	Impact of Globalization in Aravind Adigas Last Man in Tower	Effects of Crisis on Language, Literature and Culture	2020	2349-5189	Langlit, International Journal, Omerga, Dist.Osmanabad - 413606 (M.S.)	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/A%20P%20RAUT%2019-20.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/A%20P%20RAUT%2019-20.pdf</a>
17	P.S. Meshram	A Geographical study of Sex Ratio in rural and urban areas of Pune District	Emerging Trends in Humanities & Commerce	2019	22348 - 7143	Principal, Dr. D. W. Nichit, Research Journey – e-Journal	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/P%20S%20MESHRAM%2019-20.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/P%20S%20MESHRAM%2019-20.pdf</a>
<b>2018 - 2019</b>							
18	Dr. A.S. Bannore	किशोर अवस्थेतील ताणतणाव आणि समायोजन	Samiksha	2018	ISSN: 2348-7143	Int. Journal, research journey	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20A.S.%20BANNORE%2018-19.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20A.S.%20BANNORE%2018-19.pdf</a>
19	D. V. Thakare	Role of Motivation in Sports	Sports Psychology and Yogic Science	2019	ISSN: 2347-503X	International Multidisciplinary Research Journal Research Chronicler	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D.V.%20THAKRE%2018-19.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D.V.%20THAKRE%2018-19.pdf</a>
20	Dr. G. M. Kadhav	समाज माध्यमावरील अफवा मुळे होणाऱ्या जमाव हत्या (Mob Lynching) रोखण्यासाठी कठोर कायद्याची गरज	<i>Jansanwad Aani Samaijk Madhyamanch a Bhartiya Samajawar Prabhav</i>	2019	ISSN: 2319-9318	Vidyavarta - Harshwardhan Publication Pvt. Ltd. Beed	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20G.M.%20KADHAV%20%2018-19.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20G.M.%20KADHAV%20%2018-19.pdf</a>

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21	Dr. G. M. Kadhav	व्यसनाधीनता: समकालीन भारताची एक गंभीर समस्या	Drug Addiction - A Main Problem of Indian Society In Current Scenario	2019	ISSN: 2394-8426	Gurukul International Multidisciplinary Research Journal, Pune	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20G.M.%20KADHAV%201%2018-19.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20G.M.%20KADHAV%201%2018-19.pdf</a>
22	Dr. V.P. Gorde, P.S. Meshram	Tourism centers and Problems of Tourism Development	Towards Development of Tourism in Maharashtra State	2019	ISSN: 2319-9318	Vidyavarta - Harshwardhan Publication Pvt. Ltd. Beed	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%2018-19.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%2018-19.pdf</a>
<b>2017 - 2018</b>							
23	V. H. Raiwatkar	वांगमयीन अभिरुची स्वरूप स्थित्यंतरे आणि समकालीन वास्तव	अभिरुची आणि बदलता वाचकवर्ग	2017	2348-7143	Mrs. Swati Dhanraj Sonawane, Swatidhan International Publication, Nashik	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.H.%20RAIWATKAR%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.H.%20RAIWATKAR%2017-18.pdf</a>
24	C. D. Mungmode	Combustion Synthesis and Luminescence Properties of Red Emitting Sr <sup>4+</sup> -xAl <sub>6</sub> MoO <sub>16</sub> :xEu <sup>3+</sup> Phosphor	Recent Trends in Synthesis and Characterization of Futuristic Material in Science for the Development of Society	2018	"Print: 2395-6011 Online: 2395-602X"	International Journal of Scientific Research in Science and Technology	<a href="https://ijsrst.com/paper/2091.pdf">https://ijsrst.com/paper/2091.pdf</a>
25	Dr. V. P. Gorde, P.S. Meshram	पर्यावरणीय आपत्ती - भारत - 2017	पर्यावरणीय आपत्ती	2018	2319-9318	Vidyawarta	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.P.%20GORDE%2017-18.pdf</a>
26	N.N. Meshram	Factors Affecting English Learning of Undergraduate Marathi Medium Students From Gadchiroli District and Some Remedies	Teaching Language to Tribal and Rural Students: Challenges & Remedies	2017	2394-8426	Dr. Shriram Gahane, Adarsh Arts and Commerce College, Wadsa. Gurukul Int. Multidisciplinary Research Journal	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/N%20N%20MESHARAM%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/N%20N%20MESHARAM%2017-18.pdf</a>
27	S.K. Mohurle	Teaching English in Tribal Gadchiroli District:	Teaching Language to Tribal and Rural Students:	2017	2394-8426	Dr. Shriram Gahane, Adarsh Arts and Commerce College, Wadsa. Gurukul Int. Multidisciplinary Research Journal	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/S.K.%20MOMOHURLE%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/S.K.%20MOMOHURLE%2017-18.pdf</a>

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		Challenges & Remedies	Challenges & Remedies				
28	Dr. D.V. Thakare	Importance of Physical Fitness Exercise	National Workshop on <i>Importance of Stretching Exercises for Enhancement of Performance Levels in Sports Persons</i>	2018	-	Dr. Mudhukarrao Wasnik, P.W.S. Arts and Commerce College, Nagpur	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%2017-18.pdf</a>
29	Dr. D. V. Thakare	Traditional and Recreational Games in India	Application of Sciences and Social Sciences in Sports	2017	ISSN: 2347-8268	PGTD of Physical Education, RTM Nagpur University, Nagpur - Int. J. of Researches in Social Sciences and Information Studies	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%2017-18.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D%20V%20THAKRE%2017-18.pdf</a>
30	Dr. D.V. Thakare	The study of Injuries Occurring Inter-Collegiate Kabaddi Players of Gondwana University, Gadchiroli	Future Prospective of Physical Education, Sports Science and Yogic Practices	2017	ISSN:2350-1081	Department of Physical Education, SGB Amravati University, Amravati - Research Demagogur Journal	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D.%20V.%20Thakare%203%202017%20-%202018.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20D.%20V.%20Thakare%203%202017%20-%202018.pdf</a>
<b>2016 - 2017</b>							
31	Dr. V.H. Raiwatkar	<i>Golpithatil Samajikta</i>	<i>Abbedkarwad aani Namdeo Dhasal Yanchi Kavita</i>	2016	ISBN: 978-93-5235-973-8	Principal, Nagarparishad Shivaji Mahavidyalaya, Mohad, Nagpur	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.%20H.%20Raiwatkar%20Proceedings%202016%20-%202017.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/Dr.%20V.%20H.%20Raiwatkar%20Proceedings%202016%20-%202017.pdf</a>
32	D.M. Ghonmode	<i>Loknatyachya Prabhavatun Nirman Zalelya Vaishwik Kalakruti</i>	<i>Jagatikikaran Ani Marathi Loknatya</i>	2017	ISBN: 978-93-82962-92-2	Principal, Jagat College, Goregaon and Meherbaba Publisher, Nagpur	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/DM%20GHONMODE%20PROCEEDING.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/DM%20GHONMODE%20PROCEEDING.pdf</a>
33	Dr. V.H. Raiwatkar	<i>Vijay Tendulkaranchya Natakatil Vangamayin Vidroh</i>	Vijay Tendulkaranchya Vangamay	2016	ISSN: 2278-9308	Aadhar Publication, Amravati	<a href="http://www.mgc-ollegearmori.ac.in/files/publication/RAIWATKAR%20PROCEEDING.pdf">http://www.mgc-ollegearmori.ac.in/files/publication/RAIWATKAR%20PROCEEDING.pdf</a>



2020 -2021

Dr. Vijay Raiwatkar - साहित्याची संकल्पना व स्वरूप (Sahityachi Sankalpana va Swaroop)

एम. ए. मराठी (M54)

COURSE CODE : MAR 121

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**MAR 121**

साहित्यविचार

प्रथम सत्र

पुस्तक : १

साहित्याची संकल्पना व स्वरूप

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पुस्तक १

## साहित्याची संकल्पना व स्वरूप

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भाषिक व अनुदेशन संपादन

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पुस्तक १

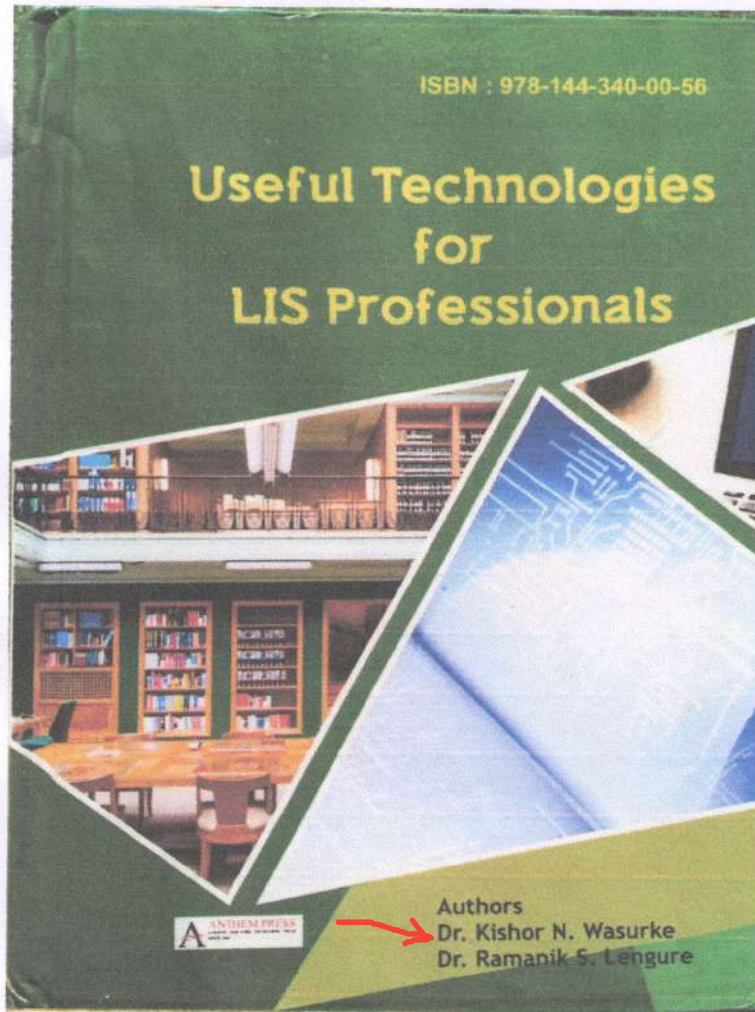
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# Useful Technologies for LIS Professionals

Authors  
Dr. Kishor N. Wasurke  
Dr. Ramanik S. Lengure

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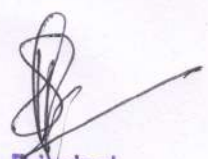


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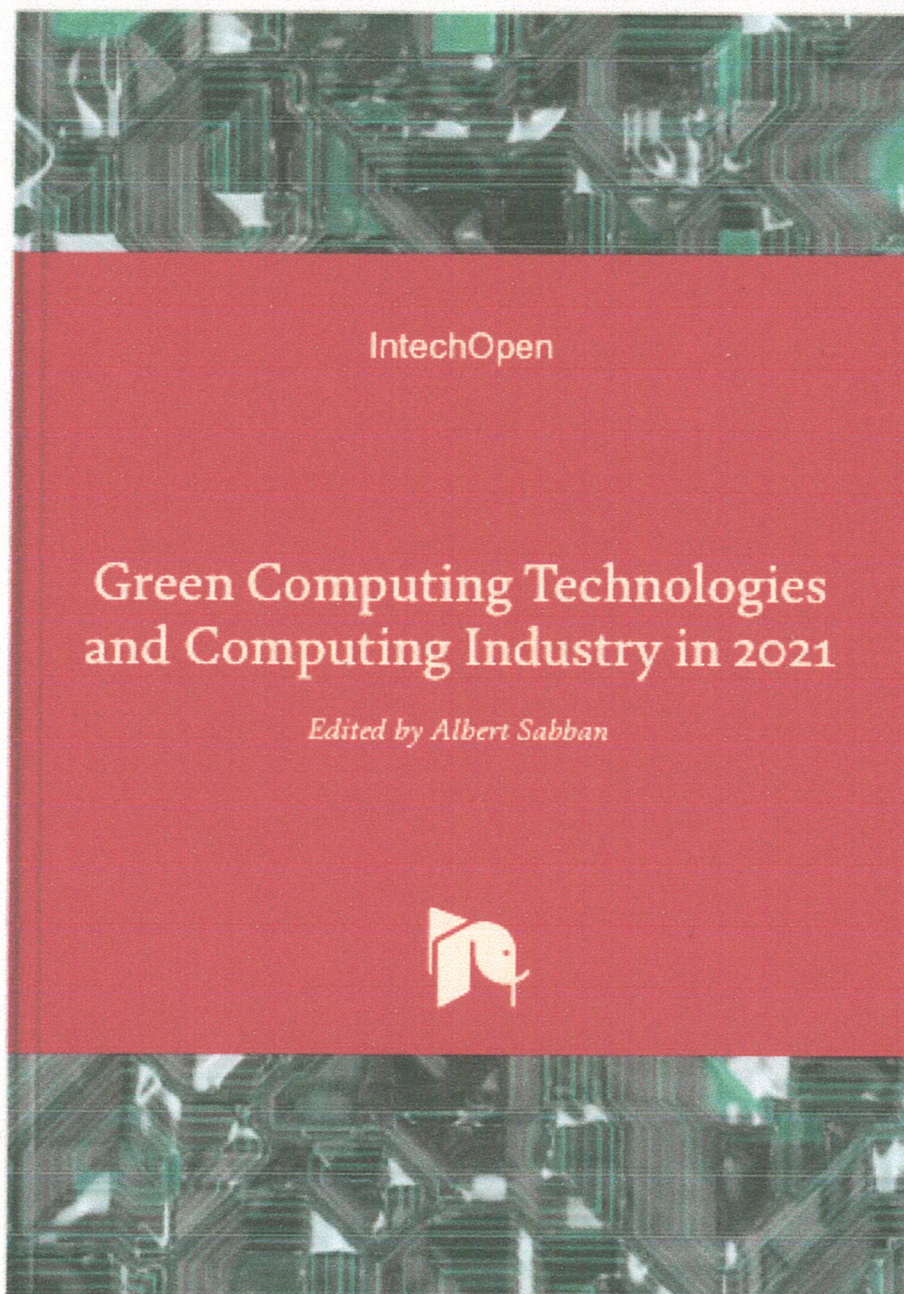
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Dr. Satish Kola - Eco-Friendly, Green Approach for Synthesis of Bio-Active Novel 3- Aminoindazole Derivatives.



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## Chapter

# Eco-Friendly, Green Approach for Synthesis of Bio-Active Novel 3-Aminoindazole Derivatives

Chandrashekhhar Devkate, Satish Kola, Mohammad Idrees, Naqui J. Siddiqui and Roshan D. Nasare

## Abstract

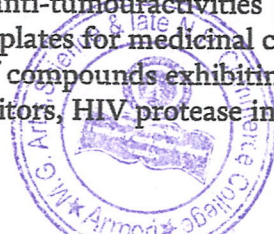
In present chapter we have reported green and highly efficient method for synthesize novel series of substituted -1H-indazol-3-amine derivative (3a-h) by cyclocondensation reaction of substituted benzonitrile (1a-h) and substituted Hydrazine (2a-h) using ceric (IV) ammonium nitrate (CAN) as a catalyst, EtOH-H<sub>2</sub>O as a ecofriendly media and reaction was carried out under ultrasound irradiation green method. The structures of newly synthesized indazole derivative (3a-h) were corroborated through spectral investigation such as elemental analysis and spectral studies like IR, C<sup>13</sup> NMR, Mass spectra and <sup>1</sup>H NMR. The compounds were assessed for their in-vitro antimicrobial activity with pathogenic microbe comprising Gram positive bacterial strains, *S. aureus* and Gram negative strains *E.coli*, *P.vulgaris*, and *S. typhi* at different concentration. The consequence of bioassay is compared with standard drug Chloramphenicol.

**Keywords:** indazol, ceric (IV) ammonium nitrate catalyst, ultrasound irradiation, ecofriendly media, antimicrobial screening

## 1. Introduction

Indazole was first defined as a “pyrazole ring fused with the benzene ring” by the scientist Emil Fisher. It is broadly studied due to its remarkable chemical and biological properties. Indazole is from the azoles family containing carbon, hydrogen and nitrogen atoms. Indazole also called as benzpyrazole or isoindazolone which containing two nitrogen atoms. It is ten  $\pi$ -electron aromatic heterocyclic systems as a pyrazole molecule. The structure of indazole is given below in cylindrical bonds is as (Figure 1).

Indazole derivatives are pharmacologically significant as they form the fundamental structure of numerous drug molecules, like Benzydamine used as anti-inflammatory agent and Granisetron, 5HT<sub>3</sub> receptor antagonist for anti-emetic in cancer chemotherapy. Two nitrogen atoms in indazole can be able to be functionalized with high selectivity at different positions. Indazole show a range of biological activity such as anti-HIV, anti-cancer, anti-platelet, anti-inflammatory, serotonin 5-HT<sub>3</sub> receptor antagonist and anti-tumouractivities [1–6]. 3-Aminoindazoles which are valuable templates for medicinal chemistry. The scaffold is found in a huge number of compounds exhibiting a large number of biological activities including kinase inhibitors, HIV protease inhibitors, MCH



macromolecules like cytoplasmic membrane covering cytoplasm which acts selective barrier to control internal composition of cell. Amino indazole derivative particularly interrupted such functional roles of cytoplasmic membrane and ionic outflow that resulted cell destruction/death. Synthesized potent bioactive substituted indazole derivatives may open new possibilities in the successful treatment of several diseases due to promising antibacterial profile. So, ample scope exists in further research of this heterocycle especially innate selectivity of these compounds needs to carry out their chemotherapy as potent antibacterial aims to target cell membrane of range of Gram-negative bacteria as to derive novel drugs of inventive era. Among the synthesized compounds most of the compounds exhibited good to moderate activity against selected strains *S. aureus*, *P. vulgaris* and *E. coli* while poor activity was evaluated for *S. typhi* (Figure 5). This variation in toxicity it may attribute due to union of different substituent attached to the core 3-aminoindazole which may enhance the biological activities of parent nucleus.

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The authors are gratified to, The Director, SAIF, Punjab University, and Chandigarh for providing, FTIR, CHN analysis, <sup>1</sup>H NMR, Mass Spectra, <sup>13</sup>C NMR. Authors are also thankful the Principal, Government Science College, Gadchiroli, for his support and cooperation and also pleased to Dr. Syed Abrar Ahmed and Dr. Mandar Paingankar, for their key assistance.

### Conflict of interest

The authors declare no conflict of interest.

### Author details

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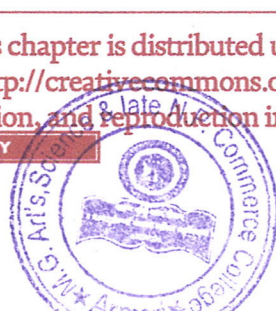
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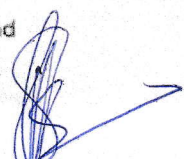
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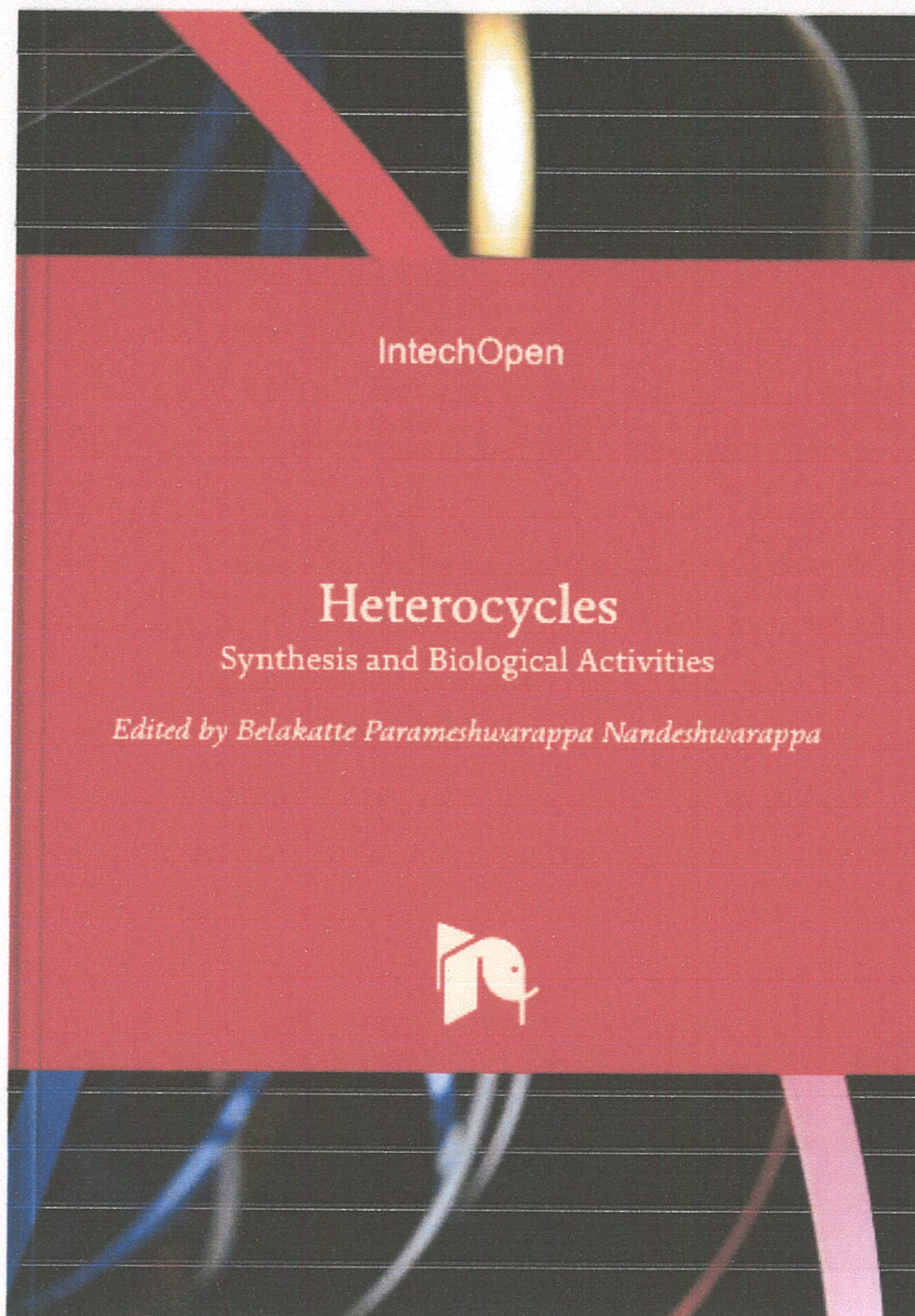
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## Chapter

# Potent Antibacterial Profile of 5-Oxo-Imidazolines in the New Millennium

Roshan D. Nasare, Mohammad Idrees, Satish S. Kola  
and Rajendra S. Dongre

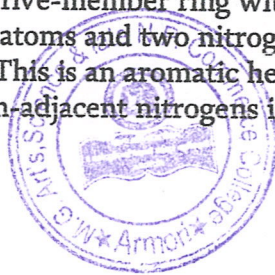
## Abstract

Pharmaceutics and therapeutics industries enforced chemists to seek/discover antibacterial novel heterocycles owing specific bioactivity and innate characteristics significance. This chapter summarized potent antibacterial profile of 5-oxo-imidazolines in the new millennium as an antibacterial against Gram-positive and Gram-negative bacteria viz. *B. thuringiensis*, *S. aureus*, *E. coli*, and *E. aerogenes* is presented in this chapter. 5-(H/Br benzofuran-2-yl)-1-phenyl 1H-pyrazole-3-carbohydrazides are condensed with 4-(arylidene)-2 phenyloxazol-5(4H)-one in acetic acid at elevated temperature to yield product 5-(H/Br benzofuran-2-yl)-N-(4-arylidene-5-oxo-2-phenyl-4,5-dihydroimidazol-1-yl)-1-phenyl-1H-pyrazole-3-carboxamides. Different substrates like 4-(arylidene)-2-phenyloxazol-5(4H)-one allowed to react with benzaldehyde hippuric acid to yield 5-oxo-imidazolines/5-oxo-4,5-dihydroimidazole. All synthesized 5-oxo-imidazolines were characterized via elemental analysis and FT-IR, <sup>1</sup>H-NMR and mass spectra techniques. All 5-oxo-imidazolines assayed in vitro for inherent antimicrobial activity at different concentration against stated bacterial strains and compared with standard chloramphenicol. 5-Oxo-imidazolines (3a and 3c) with 125 µg/mL concentration showed excellent antibacterial profile against Gram-positive bacteria, *B. thuringiensis*, while other derivatives at different concentrations showed moderate antibacterial activity against Gram-positive bacteria, *S. aureus* and *B. thuringiensis*. Gram-negative bacteria like *E. coli* and *E. aerogenes* are tested at higher concentration (1000, 500, and 125 µg/mL) and found good-to-moderate antibacterial activity. Tested products found non-active against *E. aerogenes* for 125, 61, and 31 µg/mL concentration also inactive at conc. 31 µg/mL against *E. coli*.

**Keywords:** antibacterial, Gram positive/negative, *B. thuringiensis*, *S. aureus*, *E. coli*, *E. aerogenes*, 5-oxo-imidazoline, azlactones, medicinal

## 1. Introduction

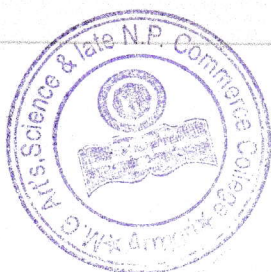
Imidazole is a planer five-member ring with molecular formula C<sub>3</sub>N<sub>2</sub>H<sub>4</sub>, containing three carbon atoms and two nitrogen atoms in 1 and 3 skeletal positions as depicted in Figure 1. This is an aromatic heterocyclic ring that's classified as a diazole family owing non-adjacent nitrogens in its skeleton.

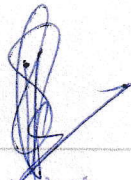


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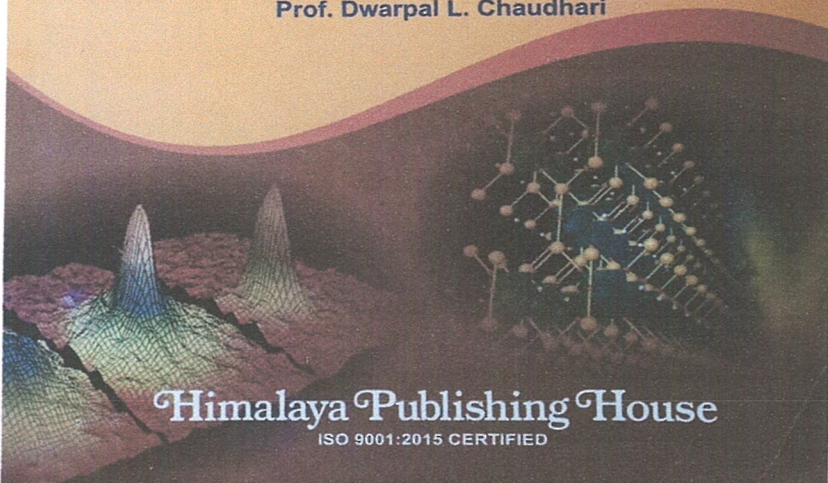
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B.Sc. Semester III (CBCS)

Paper-I (Thermal Physics)  
Paper-II (Radiation and Statistical Physics)

Dr. Ishwar S. Mohurley  
Dr. Dilip S. Choudhary  
Dr. Chhagan D. Mungmode  
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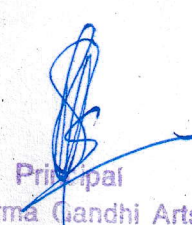
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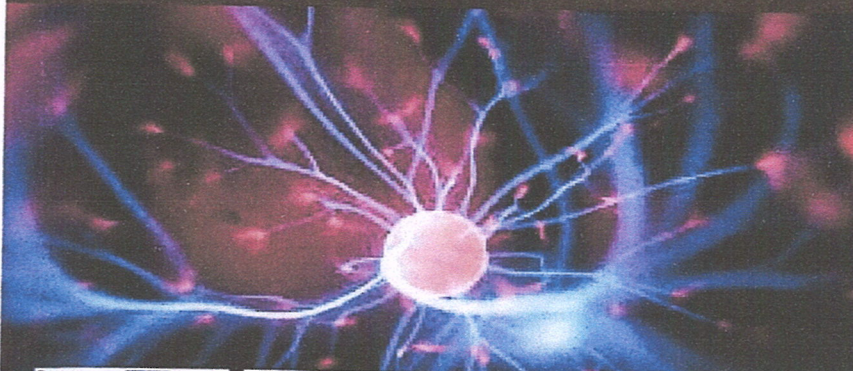
  
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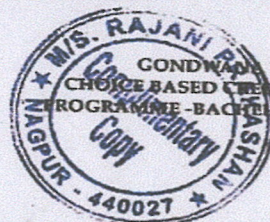
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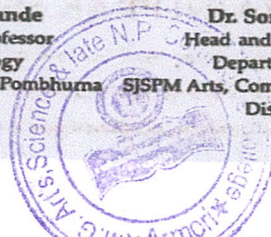
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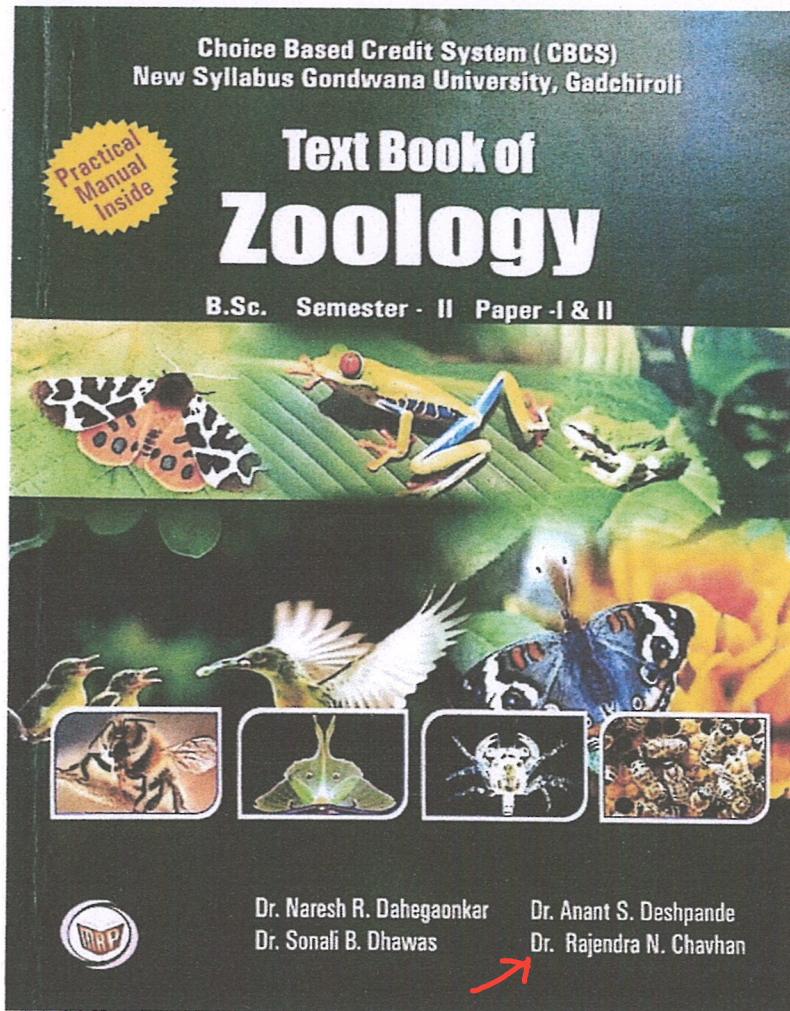
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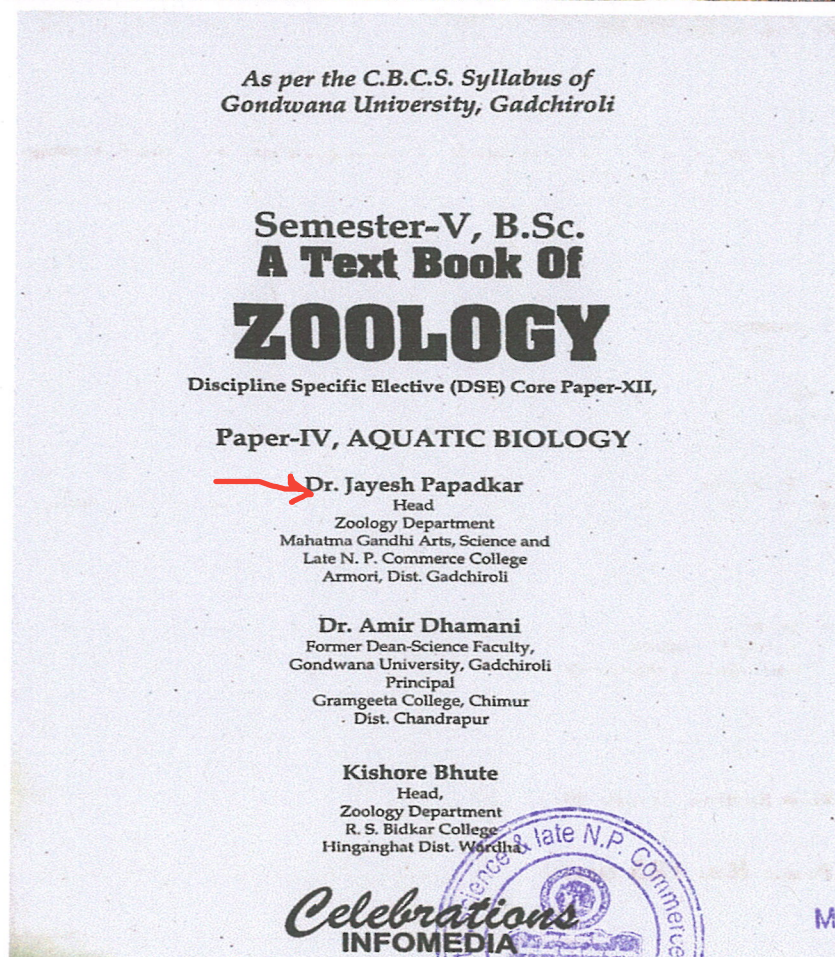
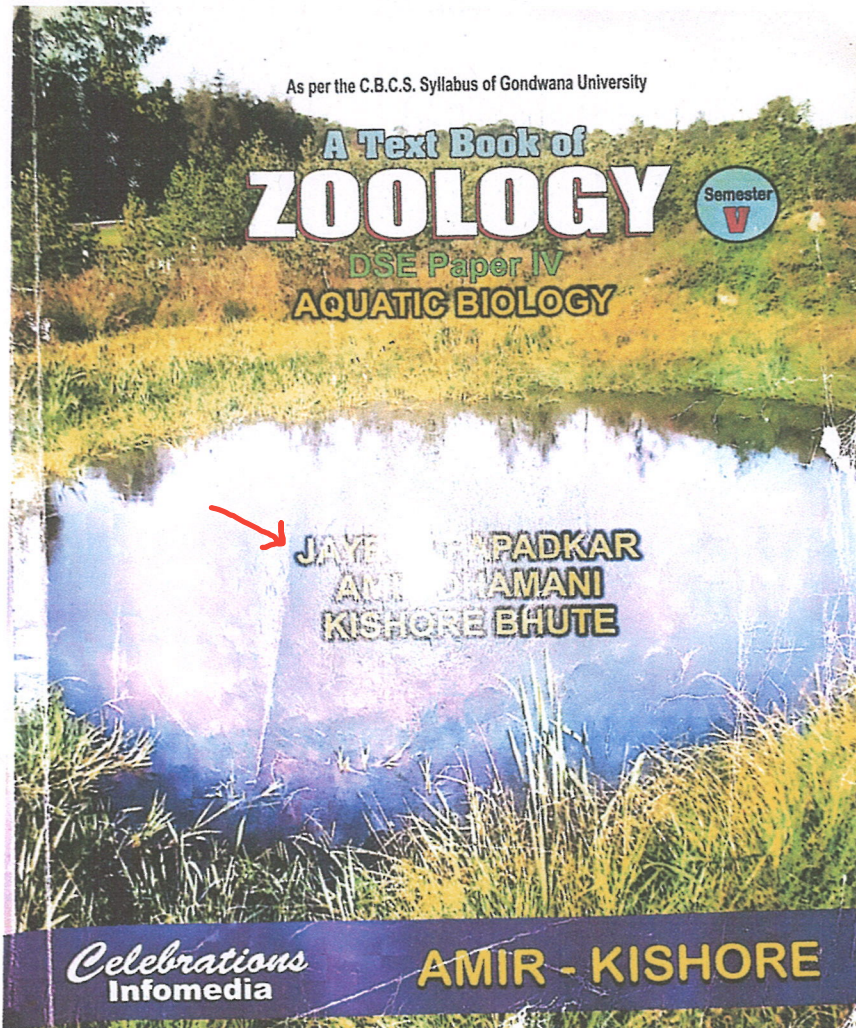
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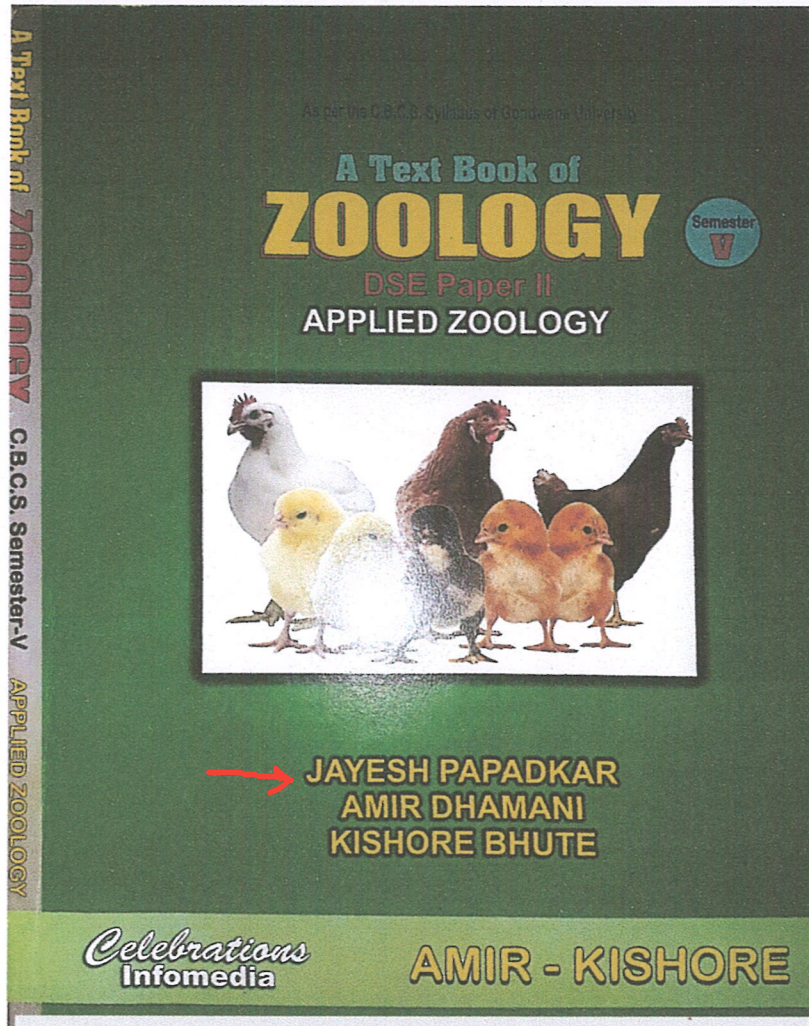
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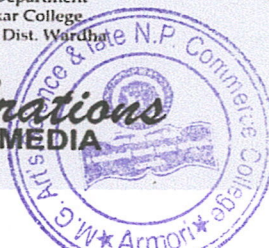
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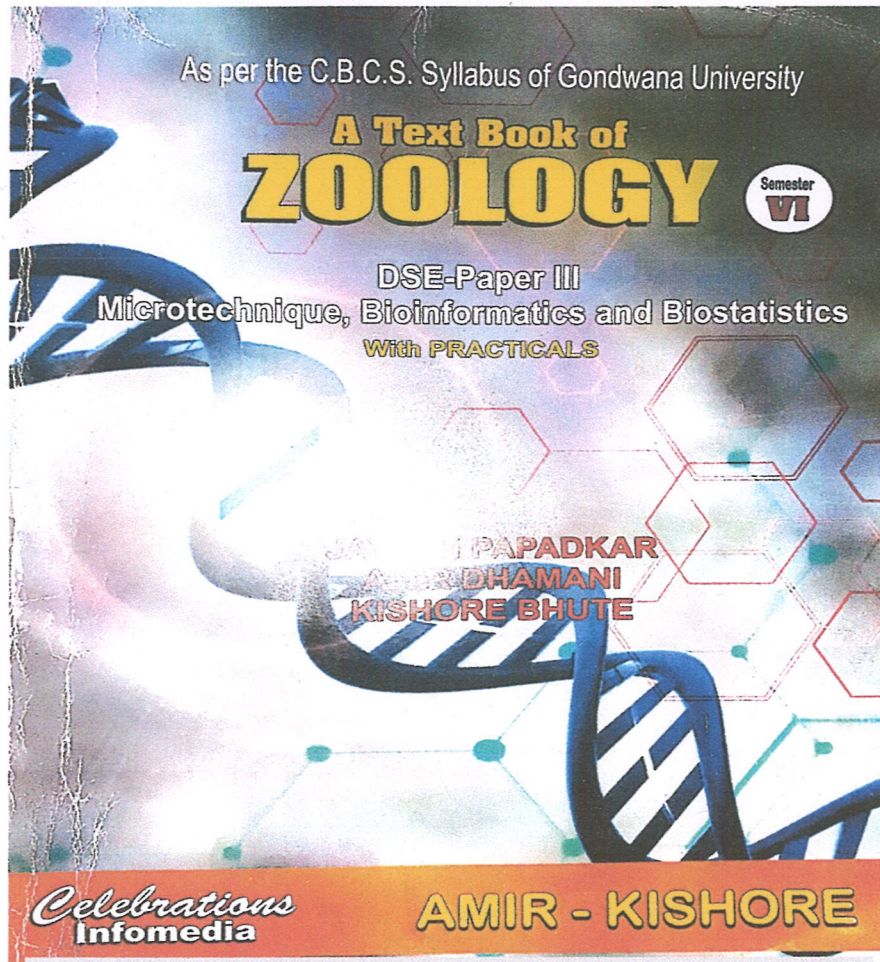
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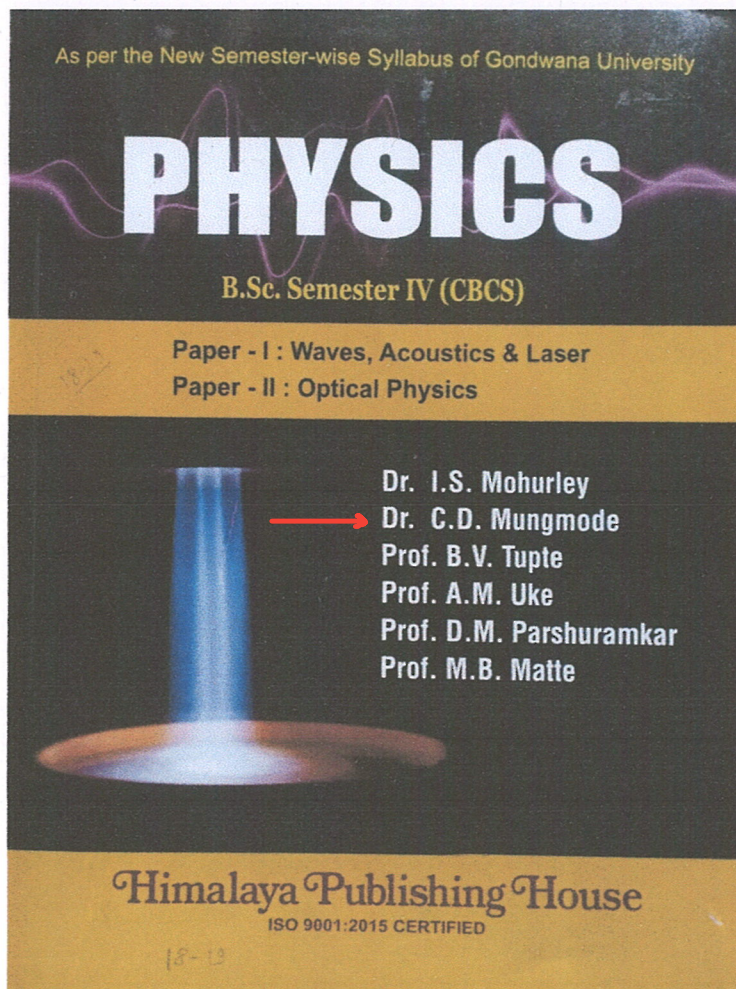
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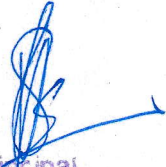
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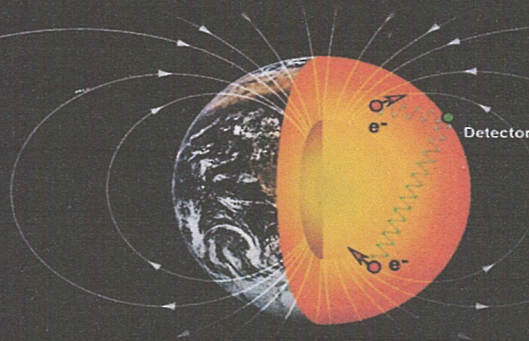
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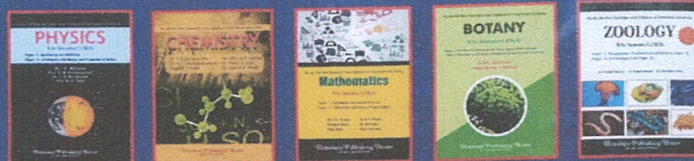
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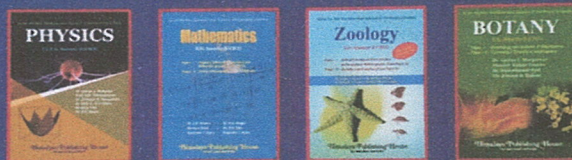


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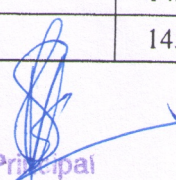


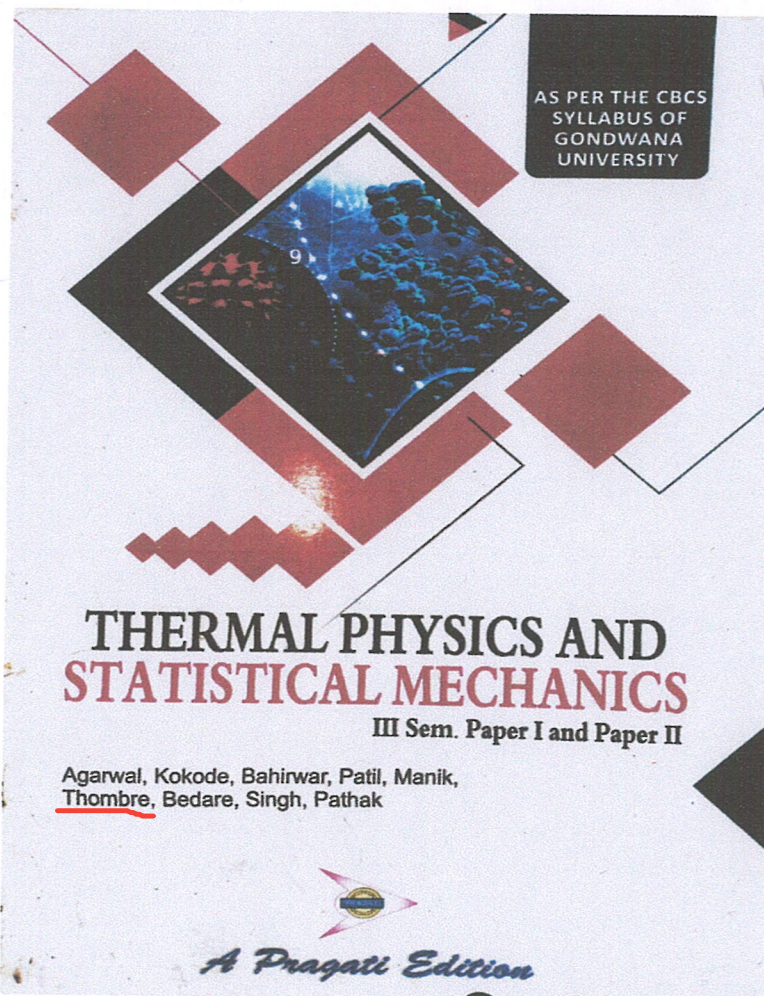


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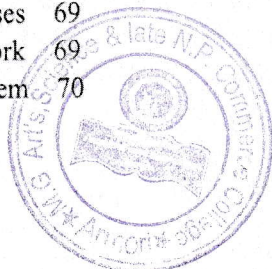
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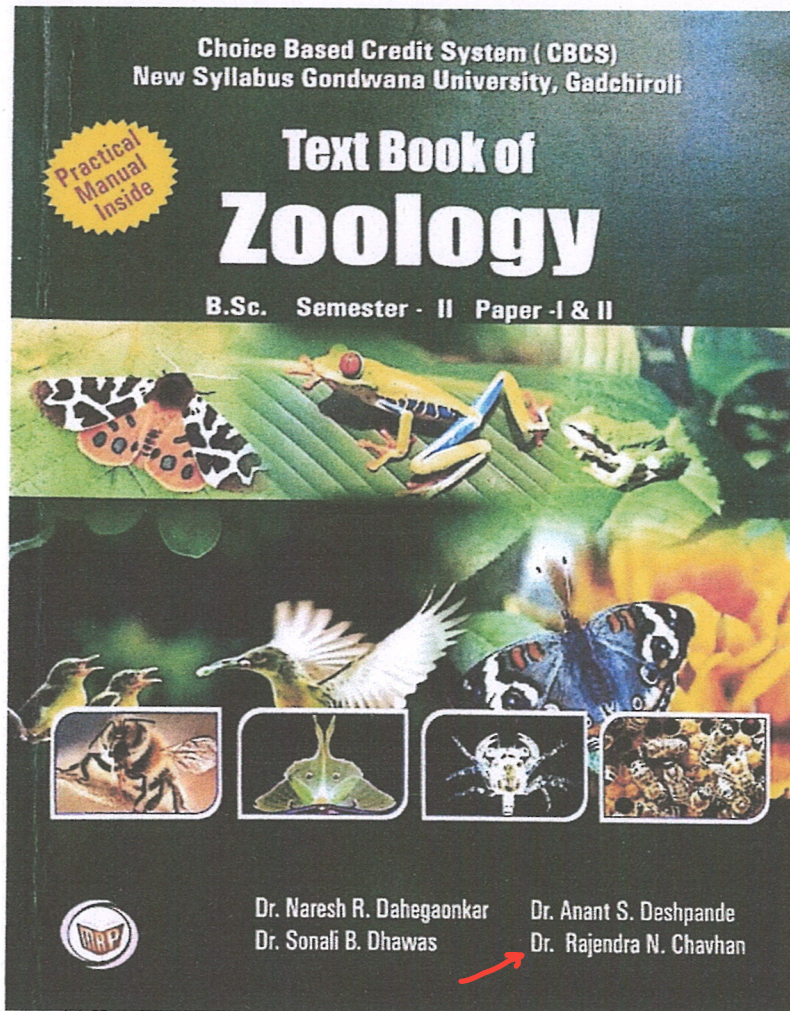
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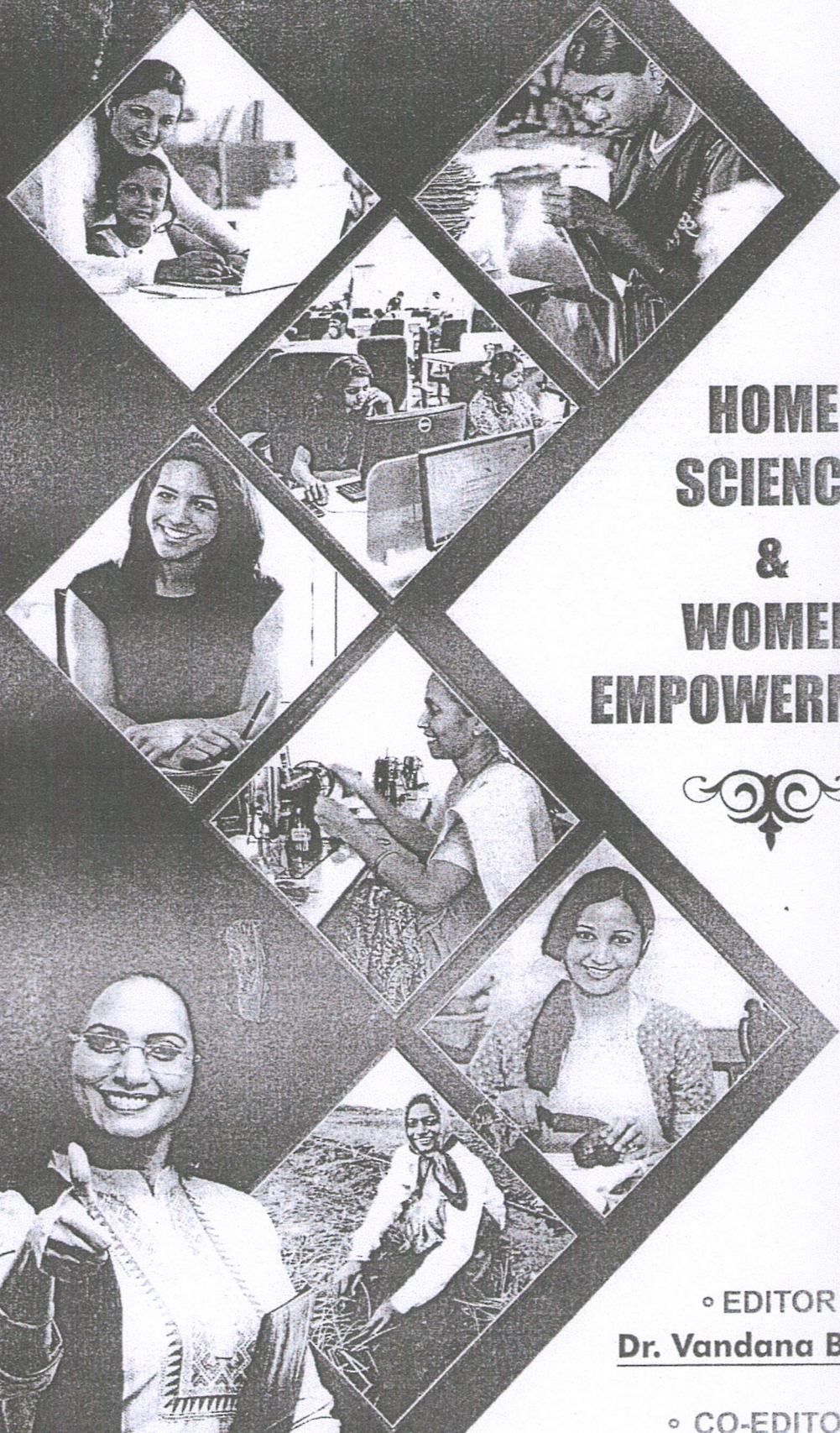
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### प्रस्तावना :

ताण किंवा स्ट्रेस हा शब्द आजकाल रोजच वापरला जातो. लहान मुलापासून तर वृद्धापार्यंत प्रत्येकजण ताणतणावात वावरत असतो. आजचे स्पर्धेचे युग, विभक्त कुटुंबपध्दती, ओढाताण, बदललेली जीवनशैली, मुलांचे संगोपन इ. अनेक कारणांमुळे मनावर ताण येत असतो. रोजच्या धकाधकीच्या व धावपळीच्या जीवनात अनेक समस्यांना सामोरे जातांना परिवर्तनाशी समायोजन साधतांना ताण निर्माण होतो. परंतू वारंवार येणारा ताण हा धोकादायक आहे.

ताण ही व्यक्तीच्या जीवनातील गतिशील अवस्था असून समायोजनाच्या गरजा पूर्ण न झाल्यामुळे उद्भवते. एखाद्या व्यक्तीवर तिच्या मनाविरुद्धचा दाब म्हणजे ताण होय. दाबामुळे ताण निर्माण होवून पूर्वस्थितीत येण्यासाठी व्यक्ती दाबाला प्रतिकार करतो, जसे-सिंगला ओढल्यानंतर तो सिंग लांबतो व सोडल्यानंतर पूर्वस्थितीत येतो. तसेच बाहेरील दाबामुळे ताण निर्माण होवून त्यातून मानसिक विचार येतात व आरोग्यावर परिणाम करतात. जीवन म्हटले की ताण आलाच त्यातून सुटका नाही पण आलेल्या ताणावर नियंत्रण ठेवणे आपल्या हातात आहे. यासाठी ताण-तणावाचे व्यवस्थापन आवश्यक आहे.

### ताण आणि आरोग्य :-

ताण आणि आरोग्य यांचा जवळचा संबंध आहे. ताण दोन प्रकारचा आहे. 1) सकारात्मक ताण, 2) नकारात्मक ताण. या दोन्ही ताणांचा आरोग्यावर परिणाम होतो. ताण आल्यावर शरीरातील निरनिराळ्या ग्रंथीतून कमी जास्त स्त्राव निघून रासायनिक बदल घडतात. एखादा आजार झाल्यानंतर आजारी व्यक्ती ताणाशी कसा सामना करतो. याचा प्रभाव आजारावर पडतो.

ताणामुळे व्यक्तीचे शारीरिक व मानसिक आरोग्य बिघडून कार्यक्षमता कमी होते. त्यामुळे व्यक्ती असमाधानी होते.

**ताणाची लक्षणे :-** ताण आल्यामुळे व्यक्तीच्या शरीरावरच नाही तर मनावर सुद्धा विपरित परिणाम होतो आणि त्यामुळे शारीरिक, मानसिक, भावनिक व वर्तनात्मक लक्षणे दिसायला लागतात.

**शारीरिक लक्षणे :-** हातापायाला मुंग्य येणे, कापणे, काळजात धडधडणे, चक्कर येणे, थकवा, निद्रानाश, डोकेदुखी, पचनक्रिया बिघडणे, हृदयाची गीत वाढणे, रक्तदाब वाढणे इ.

**मानसिक लक्षणे :-** स्मरणशक्ती कमी होणे, चिडचिडेपणा, कामात मन न लागणे, एकाग्रतेचा अभाव, निर्णयक्षमतेचा अभाव, घाबरणे हीन भावना इ.

**भावनिक लक्षणे :-** रडकेपणा, नकारात्मक विचार, नैराश्य, उदासी, लवकर राग येणे इ.

**वर्तनात्मक लक्षणे :-** आहारविषयक अनियमितता, जसे खूप खाणे किंवा कमी खाणे, चहा व कॉफी कमी पिणे, मद्यपान करणे, सिगारेट ओढणे, एखाद्या कामात लागणे, अस्वस्थ, अस्थिरता, दिनचर्येत अनियमितता, नातेसंबंधात व सहकारी यांच्यातील संबंधात दुख्ख इ.

### ताण आणि स्त्रियांचे आरोग्य व आजार :-

जीवन म्हटले की ताण हा आलाच, त्यातून सुटका नाही शिवाय स्त्रियांना घराबाहेरील व घरातील अशी दोन्ही जबाबदारी व्यवस्थित सांभाळावची असते. आपण दररोज सुदृढ नातेसंबंध टिकवून ठेवायलायची नोकरी, व्यवसाय याठिकाणी थोडीफार तडजोड करावी. अशासारखेच ताण आल्यावर मन शांत ठेवणे म्हणजे लहान ताण ठीक आहे. पण मोठ्या ताणाने स्त्रियांचे मनावर व शरीरावर विपरित परिणाम होतो. ज्या स्त्रिया गोंधळलेल्या व द्विधा मनस्थितीत असतात आणि विचार असतात. त्यांना ताण लवकर येतो.

आजच्या धकाधकीच्या काळात प्रत्येक स्त्री ही सकाळी उठल्यापासून जर झोपेपर्यंत अनेक कामे करावी लागतात. जसे-सकाळी उठल्याबरोबर नसणे, नाही, स्वयंपाकाची बाई नाही, मुले शाळेत जायला लावणे, लवकर उठत नाही, दूध नाही, एखाद्याचे आजारपण, येणारे पाहुणे तसेच बाहेर पडल्यावर कामावर जायला उशीर, गाडी पकडणे, कामाचा व्याप ठेवणे, सिग्नल, आर्थिक चणवण, बिले भरणे अशा विविध गोष्टी स्त्रियांना चिंताप्रस्त बनवित असतात. लहान लहान ताण ठीक आहे पण मोठे ताण आल्यास त्याच तिच्या आरोग्यावर विपरित परिणाम होतो. ताण एखाद्या प्रसंगामुळे येत नाही तर त्या प्रसंगावर कशी प्रतिक्रिया दिल्या जाते यावर तो ताण अवलंबून असतो.



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## A Critical Study of the major female protagonists in The Mystic Masseur and The Guide

□ Dr. Renuka L. Roy

S.K.Porwal College of Arts & Science & Commerce, Kamptee.

**Abstract:** R. K. Narayan's *The Guide* presents a spectacular account of Raju's journey from a newly released criminal from the jail to a holy man, a saint. Sir V.S.Naipaul's *The Mystic Masseur* recounts a similar life journey of a failed teacher, an unsuccessful writer's struggle to establish himself as a masseur (his ancestral profession) and then as a mystic, a faith healer. He earns his name as a holy Hindu mystic masseur, Pandit Ganesh. This paper aims at studying the role of two important female characters viz. Rosie in *The Guide* and Leela in *The Mystic Masseur* in shaping the destiny of the protagonist. Leela is an efficient householder. She cares for Ganesh's household. Leela is seen nagging most competently. Leela is endowed with sharp business acumen and worldly wisdom. Sometimes Ganesh is seen expressing his loathing for her calculative mind that reminded him of Ramlogan. Rosie is one of the major female characters of R.K.Narayan's *The Guide*. She is considered as one of the well known female characters of Narayan. Unlike Leela in Naipaul's *The Mystic Masseur*, Rosie is extremely complex as a character. The story revolves around developing relation between Rosie and Raju. Rosie has a versatile personality. She has a child like curious heart which harboured an undying love for dance.

☆☆☆

## Agha Shahid Ali : A Ghazal Writer

□ Nomesh N. Meshram

Mahatma Gandhi College, Armori.

**Abstract :** There are a very few Indian poets like Rabindranath Tagore, Aurobindo Ghosh, Kamla Das, Sarojini Naidu, Toru Dutt who could earn name and fame at international level. A name must be surely added to this list of world famous Indian English poets is a Kashmiri poet who migrated to America, Agha Shahid Ali. He has won a worldwide recognition as a ghazal writer of extraordinary merit writing in English. He is specially owed respect by the literary world in general and poetry in particular for popularising a new canon of English ghazal. This paper attempts to examine Agha Shaid Ali's contribution to English ghazal.

The American poets were attracted by this unfamiliar poetic form and the thematic variety, unique structure and its everyouth charm the American poets found something new and challengeable and when the poet like Agha Shahid Ali acquainted these Americans with this minoritarian poetic form of Arabia / Persia, they got a new way for their poetic expression and food for their feeling and thoughts. Just as Shelley's genius is essentially lyrical, Keats' odes, Browning's dramatic monologues and Milton's epics, Agha Shahid Ali's genius is undoubtedly ghazal. His name will affirmatively be carved

with golden words in the history of English language for Shahid's benefaction of this poetic form to this language. Ali's popularity is seen in popularising this popular Arabic / Persian poetic form in English.

☆☆☆



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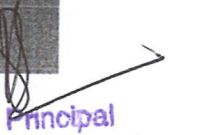
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इस पुस्तक के किसी भी अंश को किसी भी माध्यम में प्रयोग करने के लिए प्रकाशक से लिखित अनुमति लेना अनिवार्य है।

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## रवींद्रनाथ टागोर यांचे भारतीय साहित्यातील योगदान

प्रा. डॉ. विजय रैवतकर

रवींद्रनाथ टागोर ह्यांची साहित्यसंपदा विपुल आहे. भारतीय साहित्यविश्वात त्यांनी केलेली कामगिरी साहित्यरसिकांचे लक्ष वेधून घेते. त्यांचे साहित्य भारतीय भाषांत लोकप्रिय आहे. अनुवाद वा भावानुवादाच्या रूपाने विविध भाषांत त्यांचे साहित्य साहित्यरसिकांपर्यंत पोहचले आणि भारतीय भाषिकांनी त्यांच्या साहित्याला उत्स्फूर्त प्रतिसाद दिला. त्यांनी स्वतःच्या लेखनाचे केलेले इंग्रजी अनुवाददेखील प्रसिद्ध असून भारताबाहेर त्यांच्या इंग्रजी अनुवादीत साहित्याला साहित्यरसिकांनी दाद दिली. त्यांच्या साहित्याचा अभ्यास होऊ लागला. टागोरांना अपेक्षित विचारमूल्ये, जीवनमूल्ये यांचा साक्षेपी विचार होऊ लागला. टागोरांच्या साहित्याचे मराठीत जे भावानुवाद झाले त्या आधारावर त्यांच्या साहित्याचा परार्श घेऊन तसेच साहित्यविशेषांची चर्चा करून त्यांचे भारतीय साहित्यातील योगदान प्रस्तुत निबंधात विशद करावयाचे आहे.

रवींद्रनाथ टागोर हे एक बहुमुखी व्यक्तिमत्त्व होते. आधुनिक भारतीय जीवनाच्या अनेक कक्षांना स्पर्श करून त्यांनी ते समृद्ध करण्याचा प्रयत्न केला. आपल्या प्रदीर्घ व समृद्ध आयुष्यात टागोरांनी कवी, नाटककार, कादंबरीकार, कथाकार, संगीतकार, चित्रकार, विचारवंत, शिक्षणतज्ज्ञ, देशभक्त आणि विश्वबंधुत्ववादी अशा भूमिका यशस्वीपणे बजावल्या आहेत. टागोरांच्या कविता, नाटक आणि कथा या एका अजोड द्वैभाषिक संसाराचे उत्तम उदाहरण मानावे लागते. त्यांनी आपल्या मूळ बंगाली कवितांचे केलेले इंग्रजी भाषांतर इतके प्रभावी ठरले की त्यांच्या 'गीतांजली' या इंग्रजी भावानुवादीत काव्यलेखनास नोबेल पारितोषिक प्राप्त झाले. भारतीय साहित्यात साहित्याचा नोबेल प्राप्त करणारे ते एकमेवाद्वितीय भारतीय लेखक ठरले. हा त्यांच्या साहित्याचा सन्मान आहे, असे म्हणावे लागते. शिवाय त्यांनी लिहिलेले 'जन गण मन' व 'आमार शोनार बांगला' ह्या रचना अनुक्रमे भारत आणि बांगलादेश यांची राष्ट्रगीते म्हणून स्वीकारल्या गेली. हा भारतीय मातीतील लेखकाचा विश्वस्तारावरील बहुमान आहे.





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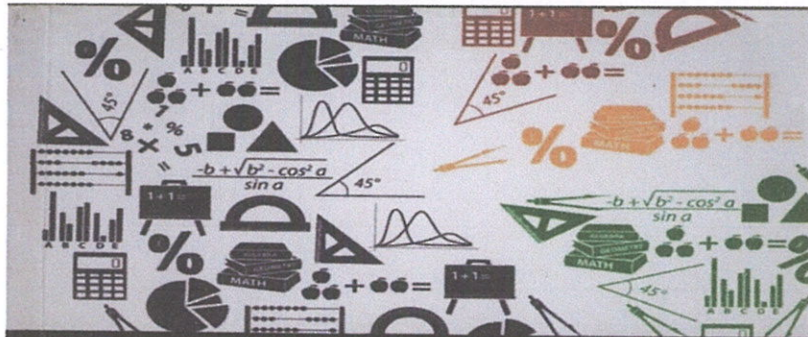
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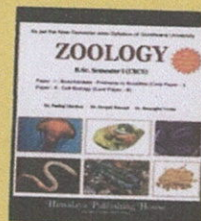
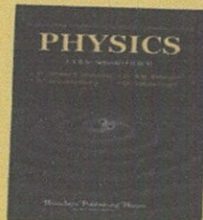
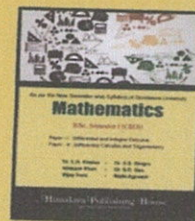
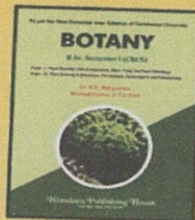
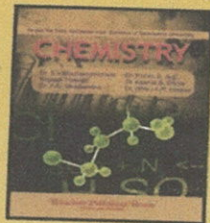
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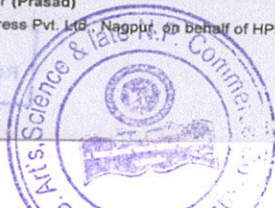
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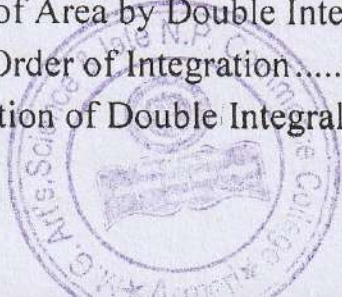


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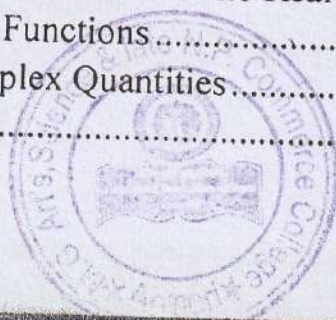
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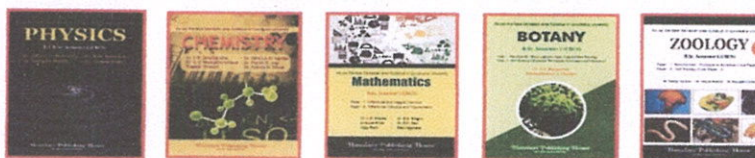
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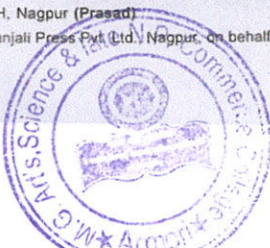
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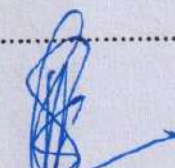


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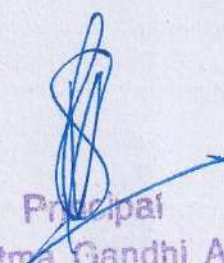
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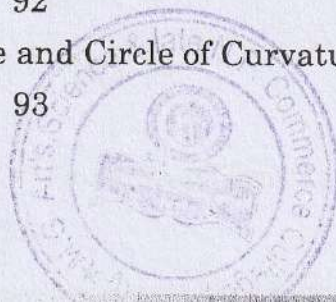
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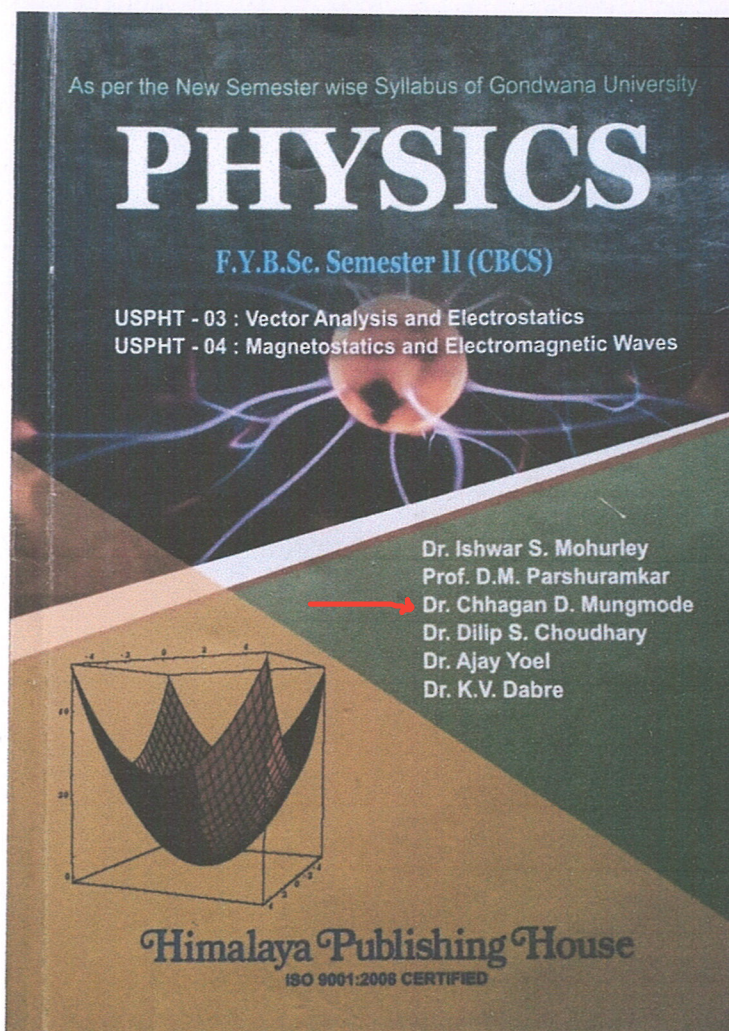
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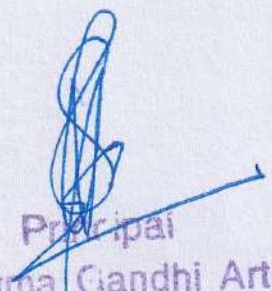
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2016 - 2017

Dr. L.H. Khalsa - Modeling in Applied Problems

Dr. L. H. Khalsa - Modeling in Applied Problems

### Modeling in Applied Problems

In this present volume, different types of operational research problems have been considered for investigation, some better techniques developed to reduce mathematical calculation, statistical characteristics done by using Reliability modelling techniques, Alternative techniques developed for Wolfe's modified simplex method and for linear fractional programming. New modified methods for game theory and for linear programming problems studied Most of them were published earlier in the journal of international or national repute. The references are given at the end of each chapter and bibliography is mentioned as a pre-requirement. This book will be beneficial for researchers, undergraduates and post graduates with a new vision of thinking. All the content are well explained by taking simple examples reduces iterations numbers which is described in other mathematical books.

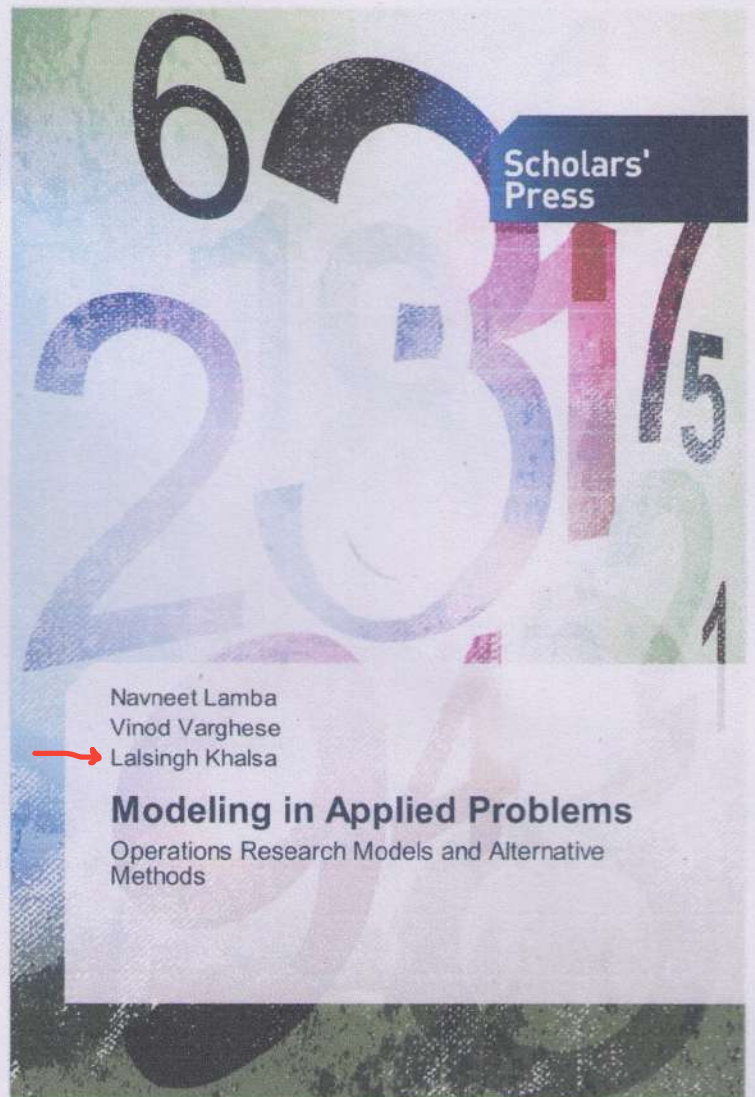
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Lamba, Varghese, Khalsa



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## Modeling in Applied Problems

.....Operations Research Models and Alternative Methods

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Vinod VARGHESE  
→ Lalsingh KHALSA



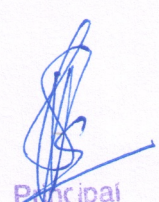
  
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## Dr. L.H. Khalsa - Thermoelastic Modeling in Homogeneous & Functionally Gradient Material

### Thermoelastic Modeling in Homogeneous & Functionally Gradient Material

Recent advances in the mathematical formulations for structural design optimization using thermoelasticity concepts play pivotal role in the development of science and technology especially aerospace engineering. As thermoelasticity is a branch of science that deals with the analysis of stresses caused by thermally induced strains which are in the elastic (recoverable) range, but the material interfaces also plays a pivotal role in the actual performance of a structure, often dictating lifetime and failure characteristics, tolerances and processing choices. The motivation of the present study is to highlight the influence of materials (i.e. homogeneous and non-homogeneous) during thermoelastic engineering problems involving structural compliances. To understand this book one must have knowledge of Residue Theory, Differential Equation, Analysis, Integral Transform and Thermoelasticity. The investigations in the present volume are based on the research work of Roychoudhury, Chenet, Tanigawa, Noda, Deshmukh, Ersilan, Wankhede and Nowacki where they have studied the direct and inverse problems of thermoelasticity on homogeneous and functionally gradient materials.

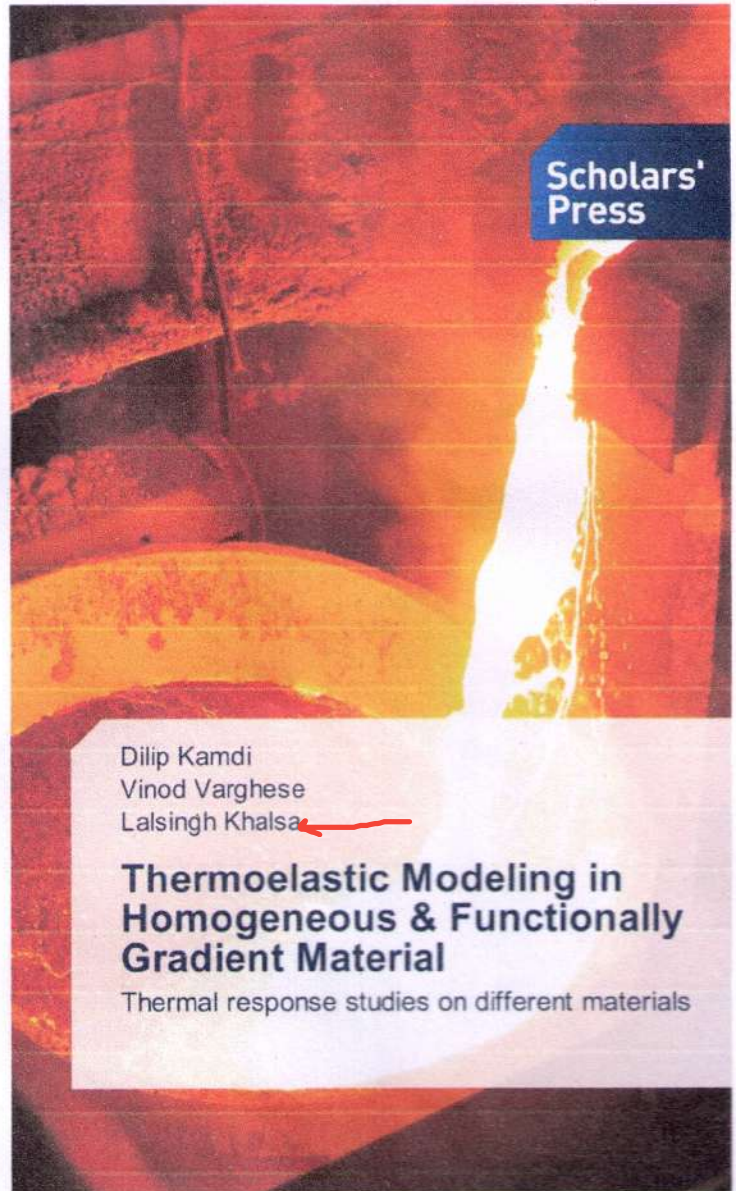
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Thermo Modeling in Homogeneous and FGMS

Kamdi, Varghese, Khalsa



Dilip Kamdi  
Vinod Varghese  
Lalsingh Khalsa

### Thermoelastic Modeling in Homogeneous & Functionally Gradient Material

Thermal response studies on different materials



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## Thermoelastic Modeling in Homogeneous and Functionally Gradient Materials

Thermal response studies on different materials

Dilip KAMDJI  
Vinod VARGHESE  
Lalsingh KHALSA




  
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## Dr. J.N. Papadkar - Reproductive Biology

The present book has been written to cover up the course on 'Reproductive Biology' prescribed for the biology students of different Indian Universities. The discussion is suitable for post graduate students; it provides the indispensable knowledge without which the most recent advancements over a wide front cannot be understood. The subject matter of the book is represented in the way which is best suited to the needs of our Indian students. The book presents the fundamental ideas of the 'Reproductive Biology' in simple and concise form and it gives to the students a proper background of subject and introduces them to the body of factual informations revealed by modern researches of the last two decades. The special features of this book are described as: 1) It has been written in simple and fluent language. 2) The subject matter is systematically arranged and it is fully illustrated by easy diagrams. 3) Each topic is discussed in the light of recent researches that have greatly illuminated many of the earlier discoveries on embryological phenomena by revealing the molecular basis of those phenomena. It is hoped that the teachers and students will find this book suitable.



Shivkumar Ghaturkar studied at Gondwana University, India. Recently he completed his Bachelor's Degree and now he is pursuing his Master's Degree in Zoology; research topic including systematics and biology of nephilidae pilipes and clavipes (spiders). The author likes to spend his free time to observe animal behaviour.



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# REPRODUCTIVE BIOLOGY

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JAYESH PAPADKAR



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Reproductive Biology

This book – "Reproductive Biology" comprising of five chapters, containing the study of Spermatogenesis, Oogenesis, Cleavage, Differentiation of Germ Layers, Implantation in Mammals. To understand this book one must have knowledge of basic embryology. The investigations in the present book are based on the research works of Shivkumar Ghaturkar and Jayesh Papadkar where they have studied Reproductive Biology.

23 years teaching experience on UG, 04 years teaching experience on PG; Three books published as co-author through Celebration Infomedia Publisher for UG syllabus of R.T.M. Nagpur University, Nagpur; 02 research papers published at international journals; 01 poster presented at international Conferences; 05 papers published at various National Conferences; 05 National seminars, 05 National workshops, 05 National Conferences attended; 01 organised National Conferences work as organising secretary; IQAC Coordinator.



Jayesh Papadkar

01 paper published in international journal of researches in biosciences, agriculture and technology with ISSN 2347-517X; 04 poster presented in National conference; 02 posters presented in Avishkar.



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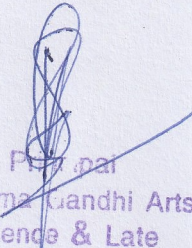
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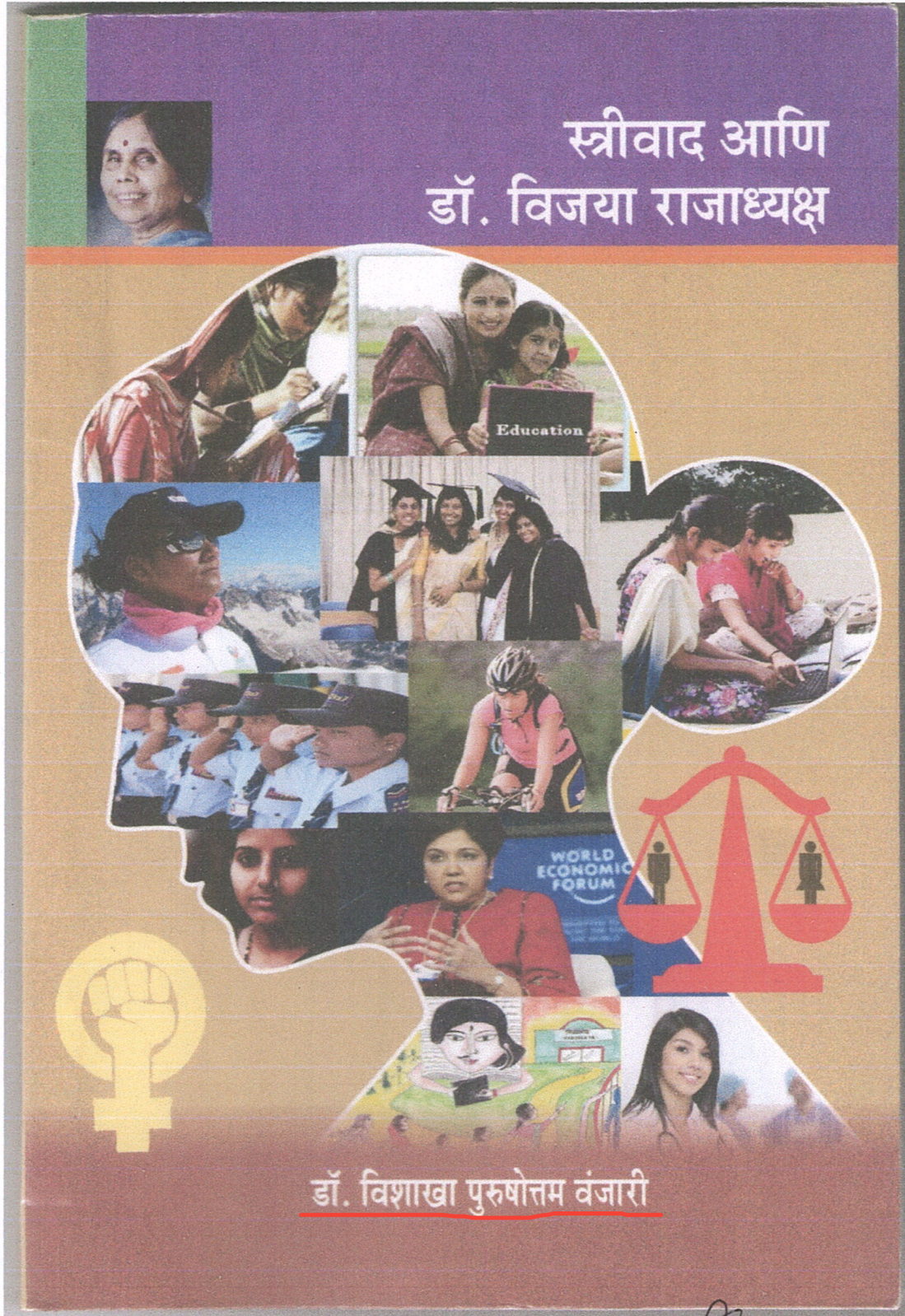
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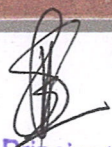
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मराठी साहित्य आणि समीक्षा यांचा विचार करता डॉ. विजया राजाध्यक्ष हे नाव आग्रहाने घ्यावे लागेल. त्यांच्या एकंदरीत लेखनातील स्त्रीवादी दृष्टिकोनाचा विविध परिप्रेक्षातून केलेला अभ्यास हा आपल्याला भारतीय लेखिकांच्या सामाजिक जाणिवा, त्यांची वैचारिक जडणघडण, आदिबंधात्मक विचार व प्रतिकूल परिस्थितीतील तिची जिगीषू वृत्ती यांना अधोरेखित करतो, या पुस्तकातून डॉ. विशाखा वंजारी यांनी हे काम अत्यंत कौशल्याने केले आहे.

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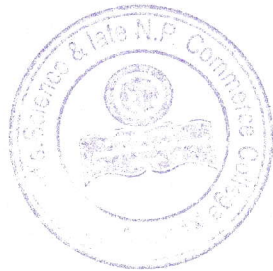
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ज्यांच्या

आशिर्वादाने आणि मार्गदर्शनात

सुखी आणि समृद्ध जीवनमार्ग गवसला

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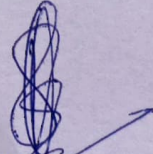
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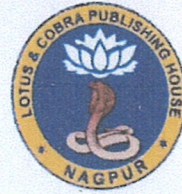


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# Tribal Development

Problem and Solution



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**A Geographical Study of tribal Tourism and its Problem in Gadchiroli District**

→ **Dr. Vijay P. Gorde**<sup>1</sup>

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**Abstract:-**

Tourist is very important factor in tourism. Tourism is meaningless excepts tourist. The word tourist is originated from Latin language. Tourist is formed from Latin word tour which is derived from the word turns. "The person who travels for the enjoyment is called as tourist."

With changing times there is a change in tourism development in tourism, different vehicles for transportation of use are used. Though tourism has entertained purpose but it has also geographical historical cultural and religious background. Tourism can be of two types – urban and rural. Importance of tourism, types of tourism, tourism management, market, places; problems of tourism are the important factor while studying tourism study.

In Gadchiroli district there is a maximum no. of rural tourist centers which includes historical forts, religious places and nature beauties. But there is a lack of facilities in rural tourist centre's as these places are not developed. This district is said to a district & forest and tribal people. Tourism of Gadchiroli district faces several problems and difficulties that include naxalite movement problem, lack of financial development, hotels and Lodging, climate, transportation, and illiteracy. People look out for the district etc.


**Introduction:-**

Tourism means a travel / journey /trip of non residential person and income acquiring to, some place without aiming at permanent residence. It may be rural or urban tourism, today this has become the most developed and important industry in the world. Traveling is a very old fact from the very beginning man is fascinated by travel & tourism. Tourism is very important profession in the world. There is no need of raw material, equipment for this profession tourism is are of most important, attractive and rising job in the world. This profession is very useful for developing country like India.

**League of nation & UNO (1937):-** "someone who visits a country and stay minimum 14 hours that person is known as foreign tourist."

Maximum forest area of Maharashtra is find in the Gadchiroli district comparatively other district very dense forest area of the district is visible in the talukas like Aheri, Dhanora, Etapalli and Sironcha.



  
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Gadchiroli district is abundant in nature beauty located in the eastern region of Maharashtra. Near about 16<sup>th</sup> century Gond kingdom was established. 75% of Gadchiroli district is a forest occupied area including the main hilly region like Aheri, Bhamragarh, Tipagarh, palasgarh, khobramendha and surjagarh. Vainganga, Pranhita, Indravati and Godavari these four river flow across the border of Gadchiroli district. In Gadchiroli district. The temperature in summer is usually recorded 45 cg. And in autumn the rain is recorded 1400 – 1500 mm paddy (rice) is a major crop of Gadchiroli district and approximately 92% of area is occupied by this crop.

This district is generally considered as rural, tribal and nuxlite district. The road transportation in Gadchiroli district is efficient. From 12 Talukas of Gadchiroli district most of the tourist places are present in rural part. These places are historical fort pilgrim centre, places of natural beauties, sanctuaries but till they are not developed.

**Study Area:-**

The area of Gadchiroli district is near about 14412 sq.km Gadchiroli district is divided from Chandrapur district dated on 26 august 1982. A Geographically Gadchiroli district is Located in the south east of Maharashtra state, Gondia and Bhandara Locate in the north of district, Chhattisgarh locate in the east while Andhra Pradesh in south Chandrapur district locate in the west, The location of the district is 19<sup>0</sup> to 21<sup>0</sup> north latitude and 80<sup>0</sup> to 81<sup>0</sup> east longitude. The ground situation of the Gadchiroli district is hilly. There are number of hills like Shrikonda, Bhamragarh, Surajagarh, Aheri, Dandkaranya. A large ground is formed due to this river. Paddy is very important crop is this area. There are 1673 small and big ponds are available in the district.

Vainganga is one of the most important river in the Gadchiroli district, which rises from Durg in Chhattisgarh. This river flow from west direction and it is the boundary line of district.

**Objective of study:-**

- 1) To facilitate the tourist centre of Gadchiroli district the scheme and plans of Maharashtra tourism Development Corporation and private hotels and lodges.
- 2) To create opportunities of employment by developing tourist centre.
- 3) To provide various a transportation facilities as well as special protection of the tourist.
- 4) To adopt varies govt. scheme to developed tourism in Gadchiroli district.
- 5) To protect and preserve the ancient monument, forts, religious spots on behalf of archeological dept.

**Tourism Centre in Gadchiroli District:-**

The tourism of Gadchiroli district chiefly include the historical and Religious, pilgrims spots, Historical monuments forts, temple and the places of nature beauty, sanctuary and zoo.

**A) Historical and pilgrim centers -**

1. Markendeshwar Temple (Markenda) – Hemandpanti temple – 35 km from Gadchiroli and 7 km from Chamorshi
2. Bhandareshwar temple (Vairagarh) – 35 km from Gadchiroli and 15 km from Armori.
3. Chaprala temple (Kartik Swami temple) -70 km from Gadchiroli and 7 km from Mulchera.
4. Semana temple – 3 km from Gadchiroli.
5. Arattoandi – On Desaijanj – Kurkheda route
6. Amgaon buti on Desaijanj – Lakhandur.
7. Khobramendha – On Kurkheda – Malewada route.
8. Lakkhamendha – (in Mahabharat lakshagruha.
9. Armori - Hemandpanti temple.
10. Sironcha – Sihasthanam temple.
11. Tipagarh – Gurubaba and Durga temple.
12. Wasala – Meghnath temple.
13. Bhowragarh - Hemandpanti temple.
14. Gogaon – Nagdev temple
15. Devkhadki – Manikdev temple.
16. Manapur and Kadholi – shriram temple.

**B) Forts –**

1. Vairagarh – 50 km from Gadchiroli and 15 km from Armori.
2. Tipagarh – 100 km from Gadchiroli.
3. Surjagarh – 145 km from Gadchiroli and 15 km from Atapalli.
4. Khobragarh – 3 km from Gadchiroli.

**C) Nature beauty places –**

1. Bhamragarh – Union of Chamul Gautam, Indravati, Parlakota River.
2. Somnur – Union of Godavari and Indravati River.
3. Prashant dhamma – Union of Vainganga and Pranhita River.
4. Binagunda – (water falls) - 40 km from Bhamragarh.
5. Jitam – (water falls) - 61 km from Alapalli.
6. Vanvaibhav – Glori of forest, Alapalli.
7. Chaprala – sanctuary – 110 km from Gadchiroli.

Lokbiradari center and Zoo, Baba Amte - monastery (3 km from Bhamragarh)



**Presents status of tourism development in Gadchiroli district:-**

Dist -Gadchiroli							<i>Ref. Year - 2012 -13</i>
Sr. No.	Taluka	Classification of Spots	No. Of Tourist Spots	Sanctioned works T. Spots			Total expenditure on development of Tourist Spots (Lacks)
				Incomplete Work in the starting of running year	New Sanctioned works	Total Works	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Desaiganj	C	2	1	1	2	10.23
2	Armori	C	4	8	4	12	81.89
3	Kurkheda	C	2	3	1	4	30.69
4	Korchi	C	2	4	2	6	40.92
5	Dhanora	C	3	1	1	2	10.23
6	Gadchiroli	C	1	1	1	2	10.23
7	Chamorshi	B/C	6	7	4	11	71.61
8	Mulchera	C	1	0	0	0	0.00
9	Etapalli	C	0	0	0	0	0.00
10	Bhamagarh	C	2	0	0	0	0.00
11	Aheri	C	3	0	0	0	0.00
12	Sironcha	C	4	2	1	3	20.60
	Total	-	30	27	15	42	276.40

*Ref. – District planning dept. Gadchiroli*

**Facilities in Tourist Places in Gadchiroli district:-**

Dist -Gadchiroli					Ref. Year - 2012 -							
					13							
Sr. No.-	Talukas	Classification of Spots	No. Of Tourist Spots	No. of Tourist places having cultural and heritage	Hotel facilities in tourist places							
					Maharashtra tourism development corporation	No. of Rooms	No. of private hotels	No. of Rooms	No. of TravelsAgents	No. of Vehicles provided by them	Expenditure spent on the development of Tourist center	Employment created during development of tourist center
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Desaiganj	C	2	0	0	0	0	0	0	0	10.23	3500
2	Armori	C	4	1	0	0	0	0	0	0	81.89	48000
3	Kurkheda	C	2	0	0	0	0	0	0	0	30.69	9000
4	Korchi	C	2	0	0	0	0	0	0	0	40.92	7000
5	Dhanora	C	3	2	0	0	0	0	0	0	10.23	6500
6	Gadchiroli	C	1	0	0	0	0	0	0	0	10.23	3800
7	Chamorshi	B/C	6	1	0	0	0	0	0	0	71.61	33800
8	Mulchera	C	1	0	0	0	0	0	0	0	0.00	00
9	Etapalli	C	0	0	0	0	0	0	0	0	0.00	00
10	Bhamagarh	C	2	0	0	0	0	0	0	0	0.00	00
11	Aheri	C	3	0	0	0	0	0	0	0	0.00	3600
12	Sironcha	C	4	0	0	0	0	0	0	0	20.60	34500
	Total	-	30	4	0	0	0	0	0	0	276.40	149700

Ref - District planning dept. Gadchiroli

**Hurdles in expansion of tourism:-**

Though Gadchiroli district has abundance of historical and religious places and natural beauties but there are several problematic factors that affect tourism in Gadchiroli district.

- 1) Eight (8) out of twelve (12) talukas from Gadchiroli district are Naxal affected talukas and hence the district is called as a naxalite district. Naxalite problem is a major factor in tourism development. The people from other district visit Gadchiroli district in a very less no.

- 2) From climate point of view an average rainfall is 65' – 75' (inch) and the summer temperature is average between 43 to 48 cg which is unfavorable temperature for tourism.
- 3) The literacy rate of Gadchiroli district is lowest in Maharashtra state 70.55% and this affects the around development of the district.
- 4) Only road transportation facilities are efficient as compared to the traffic pattern. Except Desaiganj Wadsa talukas no facilities of railway service is available in the district as well no. air service is provided to this district.
- 5) Hosteling and lodging facilities is available in the district head quarter only. These facilities are dis-satisfactory in other talukas of the district.
- 6) The economic development ratio of the district is quite less on account of the locality of the district finds major in the rural area as compare to urban area. According to 2011 census the rural population of the district is 953858 while the urban population is 117937. That means the rural population is 89% while the urban population is 11%

**Conclusion:-**

- 1) Gadchiroli district is a Naxal affected district hence the rural tourism has not yet developed.
- 2) The rural tourism of Gadchiroli district has maximum no. of insider visitor as compared to outside visitor.
- 3) Economic tourism has taken no place even though rural tourism is affected by social and cultural tourism.
- 4) Preservation of tourist spot, lodging facilities, Guest houses, hotels, transportation services are insufficient in the tourism of Gadchiroli district.
- 5) Urban tourist spots or developed as compared to rural tourism centers as good finance is provided on urban tourism.
- 6) Almost all tourist centers in Gadchiroli district are "c" grade and have to facility of hotels of Maharashtra tourism Development Corporation and private hotels.
- 7) During 2011 -2012 the amount of 572.10 lacks is spent on the development district tourism, but beside this tourism is not developed satisfactorily.

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