# **FACULTY PROFILE**



NAME: DR. SHABNAM KHAN

**DESIGNATION:** PROFESSOR

**DEPARTMENT:** MATHEMATICS

Institution: Govt. Digvijay Autonomous PG

College, Rajnandgaon

e-mail address: <u>skhan.maths@gmail.com</u>

**CONTACT NO.:** 9131280436

# **OVERVIEW:**

	Subject/Title for PhD	Year	From (University)
Graduation	B.Sc.	1980	A.P.S. University, Reewa, M.P.
Post- Graduation	M.Sc. (Mathematics)	1980	A.P.S. University, Reewa, M.P.
M.Phil.	M.Phil. (Mathematics)	Nil	Nil
Ph.D.	Mathematics Title: Application and extension of an Algorithms that compute fixed point of certain decision Functions	1995	A.P.S. University, Reewa, M.P.

# **TEACHING EXPERIENCE:**

1. UG - 39 yrs

2. PG - 39 yrs

#### **COURSES TAUGHT:**

- 1. Functional Analysis, M.Sc. Final (Mathematics)
- 2. Real Analysis, M.Sc. Previous (Mathematics)
- 3. Calculus, B.Sc. Part I
- 4. Analysis, B.Sc. Part III

#### ADDITIONAL RESPONSIBILITIES:

- a. Controller of Autonomous Examination Cell, Govt. Digvijay Autonomous P.G. College, Rajnandgaon (From 18.06.2015 to 27.08.2019)
- b. Ex-Deputy Controller of Autonomous Examination Cell, Govt. Digvijay Autonomous P.G. College, Rajnandgaon

#### **Session 2022-23**

- 1. Member of Board of Study of Hemchand Yadav University, Durg
- 2. Member of Central Board of Study
- 3. Member of Board of Study of Govt. V.Y.T. Autonomous P.G. College, Durg
- 4. Nominated Dean of Science Faculty by Honourable Chancellor
- 5. Member of Janbhagidari Samiti Govt. Digvijay Autonomous College, Rajnandgaon

#### **Session 2021-22**

- 1. Member of Board of Studies, Hemchand Yadav University, Durg
- 2. Member of Board of Studies, Govt. N. P.G. College, Raipur
- 3. Member of Janbhagidari Samiti, Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 4. Vice-Chanceller of Bharti Vishwavidyalaya, Durg has appointed as Subject Expert for Selection of Faculty Members in the Department of Mathematics on 10.03.2022.

# **Session 2020-21**

- 1. Member of Board of Studies of Hemchand Yadav University, Durg.
- 2. Member of Board of Studies of Govt. Nagarjun P.G. College, Raipur.
- 3. Member of Janbhagidari Samiti (Finance Committee) of Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.

# **Session 2019-20**

- 1. Member of Board of Studies of Govt. Nagarjun P.G. College, Raipur.
- 2. Member of Inspection Committee for temporary affiliation of new course of Late Shri Devi Prasadji Choubey Govt. College, Gandai.
- 3. Member of Inspection Committee of Govt. Navin College, Salhewara.
- 4. Member of Inspection Committee of Gayatri College, Padumtara.
- 5. Co-ordinator of Computer Training for Staff during 7-14 Dec. 2019 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.
- 6. Member of Janbhagidari Samiti (Finance Committee) of Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.

- 7. Judge for Interdepartmental Seminar Competition in Science Day Celebration 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.
- 8. Nominated by Hemchand Yadav University, Durg as Nodal office for preparing video lecture

### **Session 2018-19**

- 1. Nominated by Principal of Digvijay College, Rajnandgaon as the Controller of Autonomous Examination Cell.
- 2. Chairperson of National Workshop on "Maintainance, Repairs and Use of Laboratory Safety Measures" during 28-29 Jan. 2019 at Govt. Digvijay Auto. P.G. College, Rajnandgaon.
- 3. Co-ordinator of Workshop on "Computer Training for College Staff (Teaching and Non-teaching)" during 17-22 Dec. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon.
- 4. Co-ordinator of Inspection Committee for Temporary Affiliation of New Syllabus of Govt. Naveen Mahavidyalaya, Thelkadeeh, Rajnandgaon
- 5. Representive of Hemchand Yadav University, Durg of Govt. Attar Singh College, Bhilai
- 6. Members in college committees- self finance syllabus committee, Capacity building committee, Purchase and write-off committee.

#### **Session 2017-18**

- 1. Nominated by Principal of Digvijay College Rajnandgaon as the Controller of Autonomous Examination Cell
- 2. Nominated by the Principal as member of Planning Board Committee of Govt. Digvijay College Rajnandgaon
- 3. Members in college committees- self finance syllabus committee, Capacity building committee, Purchase and write-off committee

### **Session 2016-17**

- 1. Nominated by Honorable vice Chancellor as a Chairperson of Board of study of Mathematics
- 2. Nominated by Honorable vice Chancellor as a member of Central Board of study in Mathematics
- 3. Nominated by Principal of Digvijay College Rajnandgaon as the Controller of Autonomous Examination Cell
- 4. Nominated as member of Board of Studies of Mathematics by Govt. V.Y.T.P.G Autonomous College Durg
- 5. Nominated by the Principal as member of Planning Board Committee of Govt. Digvijay College Rajnandgaon
- 6. Members in college committees- self finance syllabus committee, Capacity building committee, Purchase and write-off committee

#### **Session 2015-16**

- 1. Nominated by Honorable vice Chancellor as the member of governing body of private college namely Sandipani Academy Achhoti, Tehsil Dhamdha, Murmunda, Durg
- 2. Nominated by Principal of Digvijay College Rajnandgaon as the Controller of Autonomous Examination Cell
- 3. Nominated as member of Board of Studies of Mathematics by Govt. V.Y.T.P.G Autonomous College Durg
- 4. Nominated by the Principal as member of planning Board Committee of Govt. Digvijay College Rajnandgaon

# **PUBLISHED PAPERS:**

- 1. Paper published entitled "Computation of optimal solution of certain problem through fixed point algorithm" in International Journal of Management Technology and Engineering, Volume XII, Issue IX, September 2022, ISSN No. 2249-7455
- 2. "Existence and Characterization of Fixed Point in Metric Spaces" in International Journal of Management, Technology and Engineering, Vol. IX, Issue III March 2019 (ISSN no. 2249-7455.)
- 3. Computation of Optimal Solution of Certain Linear Form of Problem through Fixed Point Algorithm Research Fronts Vol. VI 2016, ISSN 2250-2653.
- 4. Nature Of Equilibrium points in Certain Symmetric Jnanbha University Victoria B.C. CNADA.Vol. 23, 1993.
- 5. Existence of Common Fixed Points Compatible Maps -IJCRT , Vol.2,No.1 (2016) ISSN 2394-5745 (Special Issue)
- 6. On Computation of triangulation with Continuous Refinement of Grid Size Calcutta Mathematical Society. Calcutta. Bull. Cal. Math. Soc., 86, 279-290 (1994).
- 7. Error Bound in Computing Kakutani Fixed Points Mathematical Journal Ranchi University. Ranchi, Vol. 20, 1989 (Issued September 1996)

# **BOOK CHAPTERS:**

1. Book Chapter "Compatible Mappings of Type (A) and Common Fixed Points" published in Role of Applied Sciences in Social Implications, Volume D ISBN 78-81-959977-0-1

# MINOR RESEARCH PROJECTS (COMPLETED AND ONGOING):

1. Investigator of Minor Research Project entitled "Approximation of Fixed Points in Hyperbolic Spaces" of Autonomous examination Cell, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, Session 2022-23 (Ongoing).

# **INSTITUTIONS WORKED IN:**

1. Department of Mathematics, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, Chhattisgarh

### OTHER APPONTMENTS/ ACHIEVEMENTS:

- 1. Member of Ethics Committee
- 2. Member of MoU Committee
- 3. Convener of Quarterly and Half Yearly Examination
- 4. Convener of Library Development Committee
- 5. Member of Sammilit Nidhi samiti

#### LINK OF YOUTUBE CHANNEL:

1. http://www.youtube.com/@shabnamkhan2725

# Paper Presented in Seminar/ Conference:

# **National:**

- 1. Delivered an oral presentation entitled "Cryptography in Block-Chain in the National Seminar" in National Seminar on "Modelling and Simulation (The Applied World)" held on 3 July 2021 organized by Govt. Shyamacharan Shukla College, Dharsiwa, Raipur
- 2. "Alternated Logistic Map, Superior Iterations, Evolutionary Algorithms Compatible Mapping in Type (A) and Common Fixed Points" in National Seminar on "Recent Advances in Physical Sciences" during 18-19 Nov. 2019 at Govt. Kamladevi Rathi Girls College, Rajnandgaon, Chhattisgarh.
- 3. "Role of Computer Science in Development of Society" in "National Seminar on Impact of Computer Science and Information Technology on Modern Society" during 18-19 Jan. 2020 at Govt. E. Raghvendra Rao P.G. Science College, Bilaspur, Chhattisgarh.
- 4. "Effect of Social Media in Politics" in National Seminar on "Impact of Social Media on Society" during 6-7 Feb. 2020 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.
- 5. "Development of Number System" in National Seminar on "Recent Developments in Mathematics" during 14 Feb. 2020 at Govt. B.S.B.A. P.G. College, Dongargaon, Chhattisgarh.

- 6. Compactable Mapping of Type (A) and Comman Fixed Point" in National Seminar On Advanced Research in Physics: Its Role in Development of Society during 29 Jan. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.
- 7. National Conference on "Innovative Approaches in Teaching Learning & Evaluation" 14-15 Feb 2017 presented a paper entitled "Learner Centric Curricullum in Teaching" organised by ShriShankracharya Mahavidyalaya, Junwani Bhilai.
- 8. National Seminar on "Women Empowerment: Situation and Analysis" 6-7 December 2016 organised by Govt. Dr. B.S.B.A College, Dongargaon, presented a paper entitled "Empowering the other gender".
- 9. National conference on "Recent Trend in Mathematics and Computer Technology" 8-9 september 2016, organized by Shri Shankracharya Mahavidyalaya, Junwani, Bhilai, presented a paper entitled "Computation of Optimal solution of certain quadratic form of problem through fixed point algorithm".
- 10. National Seminar on "Energy Industry and Environment" 9<sup>th</sup> October 2015 organized by Govt. Vivekanand P.G College, Manendragarh (C.G) Presented paper entitled"Climate Change Problem caused by Global Warming"
- 11. National Seminar on "Value and Importance of Mathematical Physics" 5<sup>th</sup> December 2015 organized by Govt. Rajeev Lochan College Rajim. Presented paper entitled "Existence of common fixed point under compatible maps"
- 12. National Seminar on "Women Empowerment and Sports" 7-8 Jan 2016. Organized by Govt. Kamla Devi Mahila Mahavidyalaya, Rajnandgaon. Presented paper entitled "Sports Policies and Politics in India".
- 13. National Seminar on "Contribution of Ancient Indian Mathematicians and its uses in Present Age" organized by Govt. Dr. B.S.B.A College Dongargaon 22 and 23 Jan 2016. Invited Talk entitled "Importance and Beauty of Mathematics"
- 14. National Seminar On "RECENT TRENDS IN MATHEMATICS AND ITS APPLICATIONS 24 to 26 OCT 2004 Organised by Govt. BCS PG College, Dhamtari (CG) Presented Paper Entitled "Computing Fixed Points"
- 15. National Workshop On "THE RICH HERITAGE OF MATHEMATICS IN INDIA 26 to 27 OCT 2012 Organised by-VYTPG Autonomous College Durg Presented Paper Entitled- "Existence and Characterzation of Fixed Point in Metric space"
- 16. National Seminar of "SUSHASAN AND SUCHNA KA ADHIKAR Organised by Govt J Y Chhattisgarh P G College Raipur 16 to 17 JAN 2009 Presented Paper Entitled "Suchna ka Adhikar Satyata Janne ka Adhikar"
- 17. National Conference On "RECENT TRENDS IN MATHEMATICS AND STATISTICS on 23-24 Jan 2009 Organised by Govt JY Chhattisgarh P. G College Raipur Presented Paper Entitled
  - a. Modern Cosmological ideas as conceived in RIGVEDA (2) Generalised Fuzzy Metric Space Via Weakly Computable Mappings.
  - b. Generalized Fuzzy metric Spaces via Weakly Computable Mappings
- 18. National Seminar on "HUMAN MIGRATION TRENDS, PROBLEMS AND SOLUTIONS 19 to 20 FEB 2009 Organised by Govt Digvijay College Rajnandgaon Presented Paper entitled Rajnandgaon District ke Gram Halamkodo ke Krishak Varg Ki Pravasita Ka Adhyayan

- 19. National Conference On "ESTABLISHING KINSHIP BETWEEN MATHEMATICAL SCIENCE AND SOCIETY 30 to 31 OCT 2009 Organised by Govt VYTPG Autonomous College, Durg (CG)
  - Presented Paper Entitled- Computation of Optimal Solution through Fixed Point Algorithm.
- 20. National Seminar STATUS AND TRENDS IN DEVELOPMENT IN INDIA (WITH SPECIAL REFERENCE TO THE PRIMITIVE TRIBES) 23 to 24 FEB 2007 Organised by Digvijay Post Graduate College Rajnandgaon Presented Paper Entitled "The Socio Economic and Health Status of Primitive Tribes of Orissa".

# **International:**

- 1. Delivered an oral presentation in International Conference entitled "Compatible Mapping of Type (A) and Common fixed points" held on 6-8 Feb 2023 organized by Faculty of Science, Govt. Digvijay College, Rajnandgaon
- 2. Mathematical Modelling in National Seminar on Recent Trends and Development in Science and Humanity during 13-14 Jan. 2019 at Govt. E. Raghvendra Rao P.G. Science College, Bilaspur, Chhattisgarh.
- 3. Strong convergence theorem for accretive non self mapping with Application" in International Conference on Mathematical Scienceand Applications during 23-25 Feb. 2017 at Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh

### ORIENTATION / RFRESHER COURSE ATTENDED:

- 1. Orientation Program in Maths , May 01-29 1999, Academic Staff College Lucknow University
- 2. UGC Refresher Course on "Computer Applications in Physical And Social Sciences", Jan 02-23, 1998, Academic Staff College, University of Lucknow
- 3. UGC Sponsored Refresher Course in Maths, Aug 16-06 Sept 2000, Academic Staff College, University of Lucknow
- 4. UGC Sponsored Refresher Course on "Mathematical Algorithms And Computer Applications.", March 19-07 April 2001, U.G.c Academic Staff College, Rani Durgavati Vishwavidyalaya Jabalpur, M.P

### FDP ATTENDED:

- 1. Participated in 7 Days Faculty Development Programme held from 10-17 December 2022 organized by Department of Computer Science/Application and IQAC Cell of Govt. Digvijay Auto. P.G. College, Rajnandgaon.
- 2. Participated in National one week Faculty Development Program "ICT Tools for Effective Teaching Learning" from 23 May to 28 May 2022 organized by Amar Sewa Mandal's Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra

- 3. Participated in "International Faculty Development Program on Research and Teaching Methodology" held from 5-11 July 2021 organized by Department of Biotechnology and Department of Chemistry, Govt. V.Y.T. P.G. Auto. College, Durg.
- 4. Participated in online 7 Days "Faculty Development Program for Different Aspect of Woman Empowerment" organized by Govt. S.G.S.P.G. College, Ganj Basoda, Distt. Vidisha, M.P. from 17-23 January 2022.

### SEMINAR/ WORKSHOP/ CONFERENCE/ WEBINAR ATTENDED

- 1. Participated in the 3 Days National Level Webinar on "Conservation of National Resources and Sustainable Development" from 3 June to 5 June 2-22 organized by Govt. Digvijay College, Rajnandgaon
- 2. Participated in the 3 Days National Level Webinar on "Current and Emerging Trends in Computer Technology" from 2 June to 4 June 2022 organized by Department of Computer Science and Application of Govt. Digvijay College, Rajnandgaon
- 3. Participated in the one week National Level Workshop on "New NAAC Accreditation framework and Awareness" during 7.6.22 to 15.6.22 organized by IQAC, Govt. Digvijay College, Rajnandgaon with Arts and Science College, Nachangaon, Pulgaon (M.S.)
- 4. Participated in the 5 Days National Level Workshop on "Basics of Research Methodology" 7.6.22 to 11.6.22 during organized by Govt. Digvijay College, Rajnandgaon in collaboration with Indira Kala Sangeet Vishwavidyalaya, Khairagarh
- 5. Participated in one day workshop on "Research Paper Writing and Publication" on 20 October 2022 organized by Research Committee and IQAC of Govt. Digvijay College, Rajnandgaon
- 6. Participated in two days National Seminar on "Muktibodh ka Sahitya: Yugbodh and Pravartiya" on 12-13 Nov. 2022 organized by Govt. Digvijay College, Rajnandgaon
- 7. Participated in "National Workshop on Research Methodology" organized by Department of Political Science under the aegis of IQAV, Govt. V.Y.T. P.G. College, Durg
- 8. International Webinar on "Emerging challenges and Opportunities of Higher Education due to COVID-19 Pandemic" held on 13 June 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon.

- 9. National Webinar on "Intellectual Property Rights and Patent Filling" held on 20 June 2020 organized by Department of English and IQAC, Govt. Digvijay Auto. P.G. College, Rajnandgaon.
- 10. One week Lecture Series "E-lecture Series INDRADHANUSH" from 3-9 July 2020 organized by Hemchand Yadav University, Durg.
- 11. National Webinar on "Impact of Information Technology on Society in Corona Period" held on 9 July 2020 organized by Govt. Dr. B.S.B.A. P.G. College, Dongargaon.
- 12. Online Quiz Competition on "General Computer Knowledge" on 14 July 2020 organized by Govt. Ghanshyam Singh Gupta P.G. College, Balod
- 13. National Webinar on "Impact of COVID-19 on Income of Employment in the informal Sector" on 14 July 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 14. International Webinar on "Impact of Novel Corona Virus around the Globe and Future of Higher Education" on 18 July 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 15. National Webinar on "Values and Value Education" held on 21 Jly 2020 organized by IQAC, Govt. V.Y.T. P.G. College, Durg
- 16. Workshop on "Stress Management under Pandemic of COVID 19" on 24 July 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 17. National Webinar on "Corona Kaal me Kavitaaee" on 8 August 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 18. National Webinar on "COVID 19: New Challenge for Human Society" on 19 July 2020 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
- 19. Two Days National e-Workshop on "Challenge and Opportunities for Mathematics in the Present Global Scenario" on 31 August 2020 organized by Govt. Shyama Prasad Mukherjee College, Sitapur, Sarguja
- 20. National Webinar on "The Career opportunities in Decision Sciences and Mathematical Statics" on 25 September 2020 organized by Chandigarh University, Mohali, Punjab.
- 21. Workshop on "Computer Training for College Staff (Teaching and Non-teaching)" during 07-14 Dec. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon.
- 22. Workshop on "Innovation in examination Reform under scheme of Autonomy "on 03 Feb 2018.
- 23. National Seminar On "The Usefulness of Thoughts of Pt. Deen Dayal Upadhyaya in Present Scenerio" during 20-21 Dec. 2017 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh
- 24. National Workshop On "Cryptography and Network Security" during 05-06 Oct. 2017 at Govt. Nagarjuna P.G. College, Raipur, Chhattisgarh

- 25. Workshop on "Karyalayeen Hindi Swaroop evam Vishestayen" on 6<sup>th</sup> October 2017 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.
- 26. Workshop on "Computer Training for College Staff" 12-20 December 2016 organised by Department of Computer Science, Govt. Digvijay P.G. College, Rjn.
- 27. Workshop on "Maintainence, Repair & use of Laboratory Instrument Training" 15-16 December 2016 organised by physics department, Govt. Digvijay P.G. College, Rjn.
- 28. State Level Workshop on "Effective Teaching & Learning Methodology" 4 jan 2017 organised by Capacity Building Cell & IQAC, Govt. Digvijay P.G. College, Rjn.
- 29. National Conference on "Soil Quality & Public Health" 17-18 Jan 2017 organised by Department of Chemistry, Govt. Digvijay P.G. College, Rjn.
- 30. Participated in the Libre Office Suite Writer" training organized at Govt. Digvijay P.G. College, Rjn, organized by IIT, Bombay
- 31. Workshop "Capacity Building in Higher Education" sponsored by RUSA on 13. 05.2015 organized by Govt. Digvijay College, Rajnandgaon.
- 32. Workshop on "Dissemination of Quality Education" sponsored by RUSA on 02.07.2015 organized by Govt. Digvijay College, Rajnandgaon.
- 33. National workshop on "Swatantra Bharat ke Vikas main Mahilaon ka yogdan and Chunoutiyan" 5<sup>th</sup> Jan 2016. Organized by Govt. V.Y.T.P.G College, Durg.
- 34. State level workshop "Choice Based Credit System: An overview" sponsored by RUSA on 02.02.2016 organized by Govt. Digvijay College Rajnandgaon.
- 35. State level workshop "Research Methodology" Sponsored by RUSA on 03.02.2016 organized by Govt. Digvijay College Rajnandgaon.
- 36. National workshop on "General Relativity and Cosmology". 8-9 February 2016 organized by Kalyan P.G College, Bhilainagar.
- 37. National Workshop On 'APPLICATION OF MATHEMATICS IN DIFFERENT FIELDS OF SCIENCE 12 to 14 OCT. 2012 Organised by Govt. Nagrajuna PG College of Science, Raipur
- 38. State Level Workshop On "LATEX LAUNGUAGE AND MATHEMATICAL MODLING 8 to 9 DEC 2012 Organised by Govt PG College, Dhamtari

- 39. State Level Workshop On "NEW DIMENSIONS IN RESERCH MATHODOLOGY 20 to 21 JAN 2011. Organised by Govt Digvijay College. Rajnandgaon
- **40.** National Workshop On 'RECENT TRENDS IN GRAPH THEORY AND CRYPTOGRAPHY
  - 11 to 13 OCT 2011. Organised by-VYTPG Autonomous College, Durg
- 41. National Workshop On "APPLICATION OF COMPUTERS IN RESERCH 16 to 16 FEB 2010 Organised by Dr. R.B. Govt Navin Kanya Mahavidhyalaya, Raipur
- 42. National Workshop On 'EMERGING AREAS OF APPLICATIONS OF MATHEMATICS 26 to 28 OCT 2010 Organised by B.C.S. Govt. PG College, Dhamtari (CG)

# CHAIRPERSON IN SEMINAR/ CONFERENCE/ WORKSHOP:

- 1. In the occasion of National Mathematics Day, Department of Mathematics of Govt. Kamla Devi Rathi P.G. College invited as a special guest.
- 2. In International conference organized by Govt. Digvijay College, Rajnandgaon invited as Chair Person in Technical Session.

# PROGRAM ORGANIZED:

- 1. Convener in Value Added Certificate Course "Scientific Document Preparation using LATEX" during 01 September to 20 September 2022 organized by Department of Mathematics Govt. Digvijay College, Rajnandgaon
- 2. Convener of National Webinar "Advances in Pure and Applied Mathematics" organized by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon held on 17-18 September 2021.
- 3. Convener of Value Added Course "Scientific Document Preparation Using LATEX" organized by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon held on 20 October 2021 to 24 November 2021.
- 4. Convener of 7 Days "Faculty Development Program for Teaching and Nonteaching Staff" organized by Capacity Building Committee and Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon held on 6-13 January 2022
- 5. Convener of Workshop "NET/SET Preparation" organized by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon held on 16-18 February 2022

- 6. Co-ordinator of Workshop On "Computer Skill And Development For Teachers And Employees" Dec. 16 to 21 2010 Govt Digvijay PG College, Rajnandgaon.
- 7. Co-ordinator of Workshop On "Computer Orientation For College Staff Nov. 15 to 26 2011. Govt. Digvijay PG College, Rajnandgaon.
- 8. Co-ordinator of National Workshop On "Applications of Graph Theory In Engineering, Medical And Computer Science" Feb 21 to 23 2013 Govt. Digvijay PG College, Rajnandgaon.

# **INVITED TALK:**

- 1. Delivered Lecture on Value Added Course on Writing Research Paper in LATEX during 31 October 2022 to 12 November 2022 organized by Department of Mathematics, Govt. V.Y.T. Auto. P.G. College, Durg in collaboration with Govt. PG Madhav Science College, Ujjain (M.P.), Institute for Excellence in Higher Education, Bhopal (M.P.), Bhilai Institute of Technology, Durg (C.G.) and Bastar University, Jagdalpur (C.G.).
- 2. Delivered Lecture on Compactness and Continuity with Applications in Topological Spaces on 03 March 2023 organized by Department of Mathematics, Shaheed Durwasa Nishad Govt. College, Arjunda, Distt. Balod, Chhattisgarh
- 3. National e-certificate course on "Writing research Paper in LATEX" during 12-24 July 2021 organized by Govt. V.Y.T. P.G. College, Durg
- 4. "Continuity and Differentiability of functions of one and multi variables" during 27 July 2021 organized by Govt. Nehru P.G. College, Dongargarh, Distt. Rajnandgaon
- 5. Delivered Lecture on Limit, Continuity and organized by Department of Mathematics, Shaheed Durwasa Nishad Govt. College, Arjunda, Distt. Balod, Chhattisgarh
- 6. "Ramanujan's Contribution and Application of Mathematics" in State Level Workshop on 21 Dec. 2018 at Govt. Kamladevi Rathi P.G. College, Rajnandgaon.
- 7. "Real Number System and Applications" at Govt. Kamladevi Rathi P.G. College, Rajnandgaon.

# **MEMBER OF PROFESSIONAL BODIES:**

1. Life Time Member of Calcutta Mathematical Society.

